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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

**UNCLASSIFIED PUBLICATIONS
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LINCOLN LABORATORY**

15 March 1964



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LINCOLN LABORATORY LEXINGTON, MASSACHUSETTS

Unclassified Publications of Lincoln Laboratory, 15 March 1964, is a new cumulative listing of unclassified reports published since the Laboratory was established in 1951. The 15 July 1961 edition of Unclassified Publications, as well as Supplements 1, 2, and 3, may now be destroyed.

A Subject Index, included for the first time in this edition, should prove a valuable aid to the reader.

Progress Reports, Technical Reports and Group Reports listed herein are deposited with DDC. Out-of-print unclassified (released) reports are available, as microfilm or photoprint copies, from the Microreproduction Laboratory, Hayden Memorial Library, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139. Requests should cite the appropriate serial numbers and prices.

Accepted for the Air Force
Franklin C. Hudson, Deputy Chief
Air Force Lincoln Laboratory Office

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KEY TO SYMBOLS

*	Joint report
†	Out of print
‡	Partial support under other contract
§	Consultant or non-Lincoln author
¶	Limiter
R	Reprints available
H	Hayden Library serial number
M	Microfilm
P	Photoprint

QUARTERLY PROGRESS REPORTS

DIVISION 2

SYSTEMS

DATA SYSTEMS

	<u>DDC No.</u>		<u>DDC No.</u>
15 November 1961	269861	15 May 1963	406287
15 February 1962	272957	15 August 1963	417672
15 May 1962	275471	15 November 1963	425576
15 August 1962	283494	15 February 1964	432493
15 November 1962	289815		
†15 February 1963	297789		

DIVISION 3

RADIO PHYSICS

DIVISION 4

RADAR

	<u>DDC No.</u>		<u>DDC No.</u>
15 January 1962	271953	15 February 1962	273507
15 April 1962	275470	15 May 1962	276045
15 July 1962	283035	15 November 1962	291103
15 October 1962	289814	15 February 1963	298907
†15 January 1963	296492	15 May 1963	408676
15 April 1963	414694	15 September 1963	422233
15 August 1963	417499	15 December 1963	429499
15 November 1963	425670	15 March 1964	435689
15 February 1964	433769		

Quarterly Progress Reports

DIVISION 5 INFORMATION PROCESSING

	<u>DDC No.</u>	Hayden Serial and Prices		
† 15 September 1959	231801	H-223	M \$1.50	P \$25.30
† 15 December 1959	233920	H-139	1.50	24.10
† 15 March 1960	237551	H-126	1.50	24.40
15 June 1960	242284			
15 September 1960	247050			
15 December 1960	252199			
† 15 March 1961	256371	H-443	1.50	12.65
† 15 June 1961	260633	H-442	1.50	13.90
† 15 September 1961	263607	H-441	1.50	4.90
† 15 December 1961	268698	H-450	1.50	3.90
† 15 March 1962	273508	H-440	1.50	4.65
† 15 June 1962	277562	H-439	1.50	5.15
† 15 September 1962	285165	H-438	1.50	7.40
† 15 December 1962	294454			
15 March 1963	401494			

DIVISION 6 SPACE COMMUNICATIONS

	<u>DDC No.</u>
15 September 1963	424909
15 December 1963	431198
15 March 1964	434292

Quarterly Progress Reports

DIVISION 7
ENGINEERING DESIGN AND TECHNICAL SERVICES

<u>DDC No.</u>	<u>DDC No.</u>
† 15 November 1952	6517
† 15 February 1953	11806
† 15 May 1953	17084
† 15 August 1953	20379
† 15 November 1953	25815
† 15 April 1954	33860
† 15 July 1954	39058
† 15 October 1954	50617
† 15 January 1955	64031
† 15 April 1955	68882
† 15 July 1955	72814
† 15 October 1955	83347
† 15 January 1956	95753
† 15 April, 15 July,	
15 October 1956	13605
† 15 January 1957	13606
† 15 April 1957	147497
† 15 July 1957	151240
† 15 October 1957	110031
† 15 January 1958	110048
† 15 April 1958	133859
† 15 July 1958	303131
† 15 October 1958	304361
† 15 January 1959	305154

DIVISION 7
ENGINEERING

<u>DDC No.</u>	<u>DDC No.</u>
† 15 April 1959	222823
† 15 July 1959	222824
15 October 1959	315534
15 January 1960	315680
15 April 1960	317928
15 July 1960	319819
15 October 1960	249920
15 January 1961	253840
15 April 1961	258076
15 July,	
15 October 1961	274523
15 January 1962	270736
15 April 1962	280714
15 July 1962	282388
15 October 1962	287558
15 January 1963	294972
15 April 1963	404456
15 July 1963	413873
15 September 1963	425923
15 December 1963	429957
15 March 1964	435524

Quarterly Progress Reports

DIVISION 8
SOLID STATE

	<u>DDC No.</u>	<u>Hayden Serial and Prices</u>		
15 January 1962	270511			
15 April 1962	281678	H-399	M \$1.50	P \$3.15
15 July 1962	282145	H-416	1.50	2.15
15 October 1962	287199	H-435	1.50	4.40
15 January 1963	295737	H-470	1.50	2.40
15 April 1963	404496	H-502	1.50	2.20
15 July 1963	412949	H-541	1.50	2.20
15 October 1963	422429	H-547	1.50	2.20
15 January 1964	429866	H-574	1.50	3.00

Quarterly Progress Reports

TRANSISTORS AND SOLID STATE

Group 35

DDC No.

Hayden Serial and Prices

† 1 October 1952	
† 15 January 1953	
† 15 April 1953	
† 15 July 1953	
† 15 October 1953	
† 1 February 1954	28579

SOLID STATE RESEARCH

Group 35 - Transistors
Group 37 - Ferrites

† 1 May 1954	41457
† 1 August 1954	41456
† 1 November 1954	53355
† 1 February 1955	62359
† 1 May 1955	70113
† 1 August 1955	79337

SOLID STATE RESEARCH

Group 35

† 1 November 1955	82483
† 1 February 1956	92623
† 1 May 1956	102207
† 1 August 1956	98859
† 1 November 1956	110008
† 1 February 1957	137607
† 1 May 1957	151262

SOLID STATE RESEARCH

Groups 35, 37, 310

† 1 August 1957	151261
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SOLID STATE RESEARCH

Groups 35, 37, 310, 63, 24

† 1 November 1957	110024	H-5	M \$1.50	P \$34.05
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Quarterly Progress Reports

SOLID STATE RESEARCH

	<u>DDC No.</u>	<u>Hayden Serial and Prices</u>		
† 1 February 1958	110037	H-14	1.50	29.70
† 1 May 1958	133853	H-13	1.60	33.70
† 1 August 1958	133866	H-601		
† 1 November 1958	204401	H-7	1.80	38.50
† 15 January 1959	215804	H-20	1.60	39.40
† 15 April 1959	214567	H-45	1.95	31.00
† 15 July 1959	226851	H-22	1.60	34.60
† 15 October 1959	231991	H-44	2.05	38.20
† 15 January 1960	234915	H-64	1.50	29.50
† 15 April 1960	239537	H-119	1.50	16.90
† 15 July 1960	243927	H-168	1.50	18.40
† 15 October 1960	249058	H-360	1.50	10.65
† 15 January 1961	254036	H-279	1.50	16.90
† 15 April 1961	257442	H-305	1.50	12.15
† 15 July 1961	262282	H-331	1.50	13.65
15 October 1961	266878	H-360	1.50	10.65

SOLID STATE RESEARCH
LINCOLN LABORATORY

	<u>DDC No.</u>	<u>Hayden Serial and Prices</u>		
1961:4	274072	H-391	M \$1.50	P \$22.40
1962:1	277393	H-406	1.50	13.40
1962:2	285456	H-428	1.50	12.15
1962:3	291546	H-457	1.50	19.65
1962:4	400709	H-491	1.50	12.65
1963:1	413089	H-517	1.50	11.80
1963:2	417686	H-539	1.50	7.20
1963:3	427340	H-554	1.50	7.80
1963:4	435023	H-573	1.50	8.80

**SEMIANNUAL TECHNICAL SUMMARY REPORTS
TO ADVANCED RESEARCH PROJECTS AGENCY**

REENTRY PHYSICS PROGRAM

REENTRY PHYSICS
& PROJECT PRESS PROGRAMS

	<u>DDC No.</u>	<u>Hayden Serial and Prices</u>		<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
† 1 Oct. 1958 to 30 June 1959	228431	H-125 M \$1.50 P \$38.80	† 30 June 1961	262543	H-361 M \$2.65 P \$35.90
† 31 Dec. 1959	234627	H-127 M \$1.50 P \$22.00	† 31 Dec. 1961	273072	H-453 M \$2.05 P \$48.15
† 30 June 1960	241226	H-269 M \$1.50 P \$10.30	† 30 June 1962	283478	H-454 M \$1.80 P \$37.90
† 31 Dec. 1960	252669	H-276 M \$1.50 P \$11.80			

RADAR TECHNIQUES STUDY

HIGH-POWER TUBE PROGRAM

	<u>DDC No.</u>	<u>Hayden Serial and Prices</u>		<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
31 Dec. 1959	234063		31 Dec. 1959	234064	
30 June 1960	241910		30 June 1960	241412	
† 31 Dec. 1960	251040		† 31 Dec. 1960	250687	
			30 June 1961	260544	
			† 31 Dec. 1961	270734	
			† 30 June 1962	278675	
			31 Dec. 1962	294963	
			30 June 1963	411458	
			30 Nov. 1963	425185	H-549 M \$1.50 P \$7.20

TECHNICAL REPORTS

TR No.			DDC No.	Hayden Serial and Prices
* 1	Ionospheric Scattering and Reflection	R. M. Whitmer	5 Dec. 1951	3311
2	Some Mathematical Remarks on the Boolean Machine	I. S. Reed	19 Dec. 1951	165903
3	Use of a Delay-Line Memory to Reduce Radar Pulse-Type Interference (Wildcatting)	T. F. Rogers L. A. Ames J. A. Dumanian	21 Feb. 1952	165380
4	A Moving-Coordinate Radar Display: Operator Limitations	F. R. Naka B. B. Welles	20 Mar. 1952	165374
*† 7	Noise-Like Signals and Their Detection by Correlation	B. L. Basore	26 May 1952	4641
8	Results of Ground-Clutter-Elimination Experiments	R. H. Baker H. M. Elliott	30 June 1952	969
9	A New Method of Teletype Modulation	D. J. Gray	22 Sept. 1952	928
11	Wide-Deviation Frequency-Modulated Oscillator	D. J. Gray V. P. Gurske W. E. Morrow, Jr.	6 Aug. 1952	958
† 12	Boolean Functions of a Real Variable and Its Applications to a Model of the Digital Computer and Discrete Probability	I. S. Reed	14 Aug. 1952	968
† 13	An Analysis of the Detection of Repeated Signals in Noise by Binary Integration	J. V. Harrington	14 Aug. 1952	949
† 14	An Application of Matrix Theory to the Tracking and Smoothing Equations	I. S. Reed G. P. Dinneen	3 June 1953	19276 H-31 M \$1.50 P \$6.40
15	Symbolic Synthesis of Digital Computers	I. S. Reed	17 Oct. 1952	2230
† 16	The Measurement of Frequency Modulation in Pulse Magnetrons with a Microwave Interferometer	J. J. G. McCue	16 Oct. 1952	11811
18	An Analytic Study of the Symmetric P-N Junction in Semiconductors	L. Bess	14 Nov. 1952	17010

Technical Reports

TR No.			DDC No.	Hayden Serial and Prices
19	Use of H Field Coupling in Directional Couplers	C. W. Jones	5 Mar. 1953	17081
† 20	An Analysis of Signal Detection by the Sequential Observer	I. S. Reed	12 Mar. 1953	17082
				H-16 M \$1.50 P \$9.70
† 21	Correlation Analysis of VHF Signals	A. J. Lephakis	18 May 1953	11808
† 22	Signal-to-Noise Improvement through Integration in a Delay-Line Filter System	J. Freedman J. Margolin	13 May 1953	19279
				H-291 M \$1.50 P \$3.65
23	PPI Light-Spot-Brightness Probability Distributions	G. C. Sponsler F. L. Shader	17 June 1953	20232
†† 24	Automatic-Alarm Radar for PROJECT COUNTER CHANGE (Final Technical Report)	H. G. Weiss F. R. Naka J. Freedman W. P. Harris J. W. Meyer J. F. Bennett	4 Aug. 1953	20233
* 25	Some Notes on Transistor Circuits	R. B. Adler M. Boisvert C. R. Hurtig S. J. Mason	6 Jan. 1953	17007
26	The Lower Modes of a Concentric Line Having a Helical Inner Conductor	L. Stark	2 July 1953	19277
† 27	The Transient Response of Transistor Switching Circuits	I. L. Lebow R. H. Baker R. E. McMahon	7 July 1953	21107
				H-25 M \$1.50 P \$7.60
28	A Waveguide-Coax Hybrid Junction	C. W. Jones	14 July 1953	20234
31	Matching Filtered and Unfiltered Displays	B. F. Green, Jr.	27 July 1953	25812
32	Transistor Shift Registers	R. H. Baker I. L. Lebow R. E. McMahon	30 July 1953	19278
33	Correlation Detection Using Stored Signals	P. E. Green, Jr.	4 Aug. 1953	20524
* † 34	Statistical Theory Applied to Communication through Multipath Disturbances	R. Price	3 Sept. 1953	28497
				H-374 M \$1.50 P \$10.65

Technical Reports

TR No.			DDC No.	Hayden Serial and Prices
† 35	The Statistical Theory of Detection. I: Optimum Detection of Signals in Noise	D. Middleton	2 Nov. 1953	30080 H-17 M \$1.50 P \$23.20
† 36	The Time Required to Search for Numbers on Large Visual Displays	B. F. Green, Jr. W. J. McGill H. M. Jenkins	18 Aug. 1953	21109
37	Theory of Radio Transmission by Tropospheric Scattering Using Very Narrow Beams	H. G. Booker § J. T. deBettencourt	16 June 1954	37146
† 38	Normal Tropospheric Propagation of Short Radio Waves Well Beyond the Horizon	T. J. Carroll R. M. Ring	12 Feb. 1954	33890
39	Coding for Constant-Data-Rate Systems. Part I. A New Error-Correcting Code	R. A. Silverman M. Balser	23 Oct. 1953	28496
40	A Theory of Magnetic-Domain Creation and Flux Reversal in Polycrystalline, Ferromagnetic Materials	J. B. Goodenough N. Menyuk	6 Nov. 1953	28494
41	Jamming Tests on NOMAC Systems	B. M. Eisenstadt P. L. Fleck, Jr. O. G. Selfridge C. A. Wagner	25 Sept. 1953	20419
42	An Ultrasonic Continuously Variable Delay Line	W. P. Schneider	22 Sept. 1953	21110
43	Isolation of Trace Quantities of Arsenic from Germanium Samples by Solvent Extraction	M. Green J. A. Kafalas J. Lowen	2 Mar. 1954	30161
† 44	A Class of Multiple-Error-Correcting Codes and the Decoding Scheme	I. S. Reed	9 Oct. 1953	25814 H-15 M \$1.50 P \$5.50
47	Performance on a Visual Monitoring Task as a Function of the Rate at Which Signals Occur	H. M. Jenkins	29 Oct. 1953	28492
48	Coding for Constant-Data-Rate Systems. Part II. Multiple-Error-Correcting Codes	M. Balser R. A. Silverman	23 Feb. 1954	30162
49	Speed and Accuracy of Reading Polar Coordinates on a Horizontal Plotting Table	B. F. Green, Jr. L. K. Anderson	11 Dec. 1953	28491

Technical Reports

TR No.				DDC No.	Hayden Serial and Prices
† 50	A Practical Method of Designing RC Active Filters	R. P. Sallen E. L. Key	6 May 1954	40828	H-9 M \$1.50 P \$7.75
51	Folded Unipole Antennas	J. Leonhard R. D. Mattuck A. J. Poté	2 July 1954	39059	
54	Magnetostriction Filters	H. M. Elliott	4 Aug. 1954	47800	
55	Bandwidth of Microwave Ferrite Devices	R. H. Fox	11 Aug. 1954	40830	
† 56	Comparative Performance of 10-cm and 70-cm Radar Over the Sea	J. Freedman M. M. Kessler V. L. Lynn D. A. McKee W. W. Ward	25 Aug. 1954	42667	
† 57	Probability of Error in NOMAC Systems	G. L. Turin	18 Jan. 1954	30163	
58	Electrostatic Potential Distribution for the Helically Wound Postdeflection Accelerator of a Conical Cathode-Ray Tube	G. C. Sponsler	20 Jan. 1954	30164	
59	A Helical-Line Phase Shifter for Ultra-High Frequencies	L. Stark	4 Feb. 1954	30165	
60	Tables of $n \log_2 n$ and $n \log_{10} n$ for n from 1 to 1000	G. A. Miller P. M. Ross	10 Feb. 1954	33889	
61	Storage-Tube Slowed-Down Video System	E. W. Bivans S. P. Detwiler J. V. Harrington	15 Mar. 1954	30166	
63	Modifications to the AN/CPS-18 Radar	R. R. Fidler R. T. McCoy F. L. Niemann	15 Apr. 1954	34615	
64	An Automatic Electron-Trajectory Tracer Study of Helix- and Band-Type Postdeflection Acceleration	G. C. Sponsler	26 May 1954	40827	
65	Extension of Nonreciprocal Ferrite Devices to the 500- to 3000-Mcps Frequency Range	R. H. Fox B. Lax	3 Sept. 1954	47921	
† 67	A Common Co-ordinate System for the Utilization of Data from Several Radars	D. Goldenberg § E. W. Wolf	13 Sept. 1954	50611	H-18 M \$1.50 P \$16.60

Technical Reports

TR No.				DDC No.	Hayden Serial and Prices
68	A Nonreciprocal Four-Pole Ring Circuit	R. H. Fox	17 Sept. 1954	47799	
69	Ferrite Devices and Applications at Microwave Frequencies	R. H. Fox	27 Sept. 1954	64026	
† 70	Microwave Susceptibility Measurements in Ferrites	J. O. Artman P. E. Tannenwald	27 Oct. 1954	56356	H-1 M \$1.50 P \$7.25
71	Ferromagnetic Resonance in Manganese Ferrite Single Crystal	P. E. Tannenwald	30 Sept. 1954	50604	
72	Characteristics and Capabilities of Automatic Alerting Radar X-3	H. G. Weiss F. R. Naka	15 Oct. 1954	55745	
† 73	Some Queue Processes Associated with Buffer-Storage Systems	I. S. Reed	2 Dec. 1954	56355	H-396 M \$1.50 P \$6.40
74	A Punch-Card Abstract File on Solid State and Transistor Literature	L. D. Patterson	12 Jan. 1955	64029	
† 75	Some Results in the Study of Narrow-Band Gaussian Noise	R. Price	26 Jan. 1955	64030	
76	Final Report on the Phoenix Facsimile System	R. M. Whitehorn	13 June 1955	72815	
* 80	1/f Noise and Related Surface Effects in Germanium	A. L. McWhorter	20 May 1955	64023	
* 81	Investigations of Scattering and Multipath Properties of Ionospheric Propagation at Radio Frequencies Exceeding the MUF	W. G. Abel J. T. deBettencourt J. F. Roche J. H. Chisholm	3 June 1955	76494	
† 82	A Bistatic CW Radar	E. A. Sloane E. S. Candidus J. Salerno M. Skolnik	6 June 1955	76454	
83	18-Mcps Field-Strength Measurements Over Sea Water	S. J. Fricker R. P. Ingalls W. T. Quinn M. L. Stone C. A. Stutt	14 June 1955	76455	

Technical Reports

TR No.				DDC No.	Hayden Serial and Prices
84	Investigations of Angular Scattering and Multipath Properties of Tropospheric Propagation of Short Radio Waves Beyond the Horizon	J. H. Chisholm P. A. Portmann J. T. deBettencourt J. F. Roche	26 Sept. 1955	85995	
85	Effects of Dislocations in Germanium and Silicon	A. D. Kurtz	13 July 1955	76495	
86	Project Caterpillar Antenna Measurements	S. J. Fricker R. P. Ingalls W. T. Quinn M. L. Stone C. A. Stutt	22 Dec. 1955	92635	
89	Theory of Ferrites in Rectangular Waveguides	K. J. Button B. Lax	1 Aug. 1955	70106	
91	UHF Long-Range Communications Systems	G. L. Mellen W. E. Morrow, Jr. A. J. Poté W. H. Radford J. B. Wiesner	5 Aug. 1955	80774	
92	Some Remarks on Statistical Detection	W. L. Root T. S. Pitcher	10 Aug. 1955	85993	
93	Phase and Amplitude Variability in Medium-Frequency Ionospheric Transmission	D. G. Brennan M. L. Phillips §	16 Sept. 1957	110016	
†95	Several Binary Sequence Generators	N. Zierler	12 Sept. 1955	89135	H-230 M \$1.50 P \$4.30
98	Transistorized Communication Receiver	S. Schwartz	4 Nov. 1955	80773	
99	Comparison of Signal and Noise in Full-Wave and Half-Wave Rectifiers	M. D. Rubin J. M. Stacey	30 Nov. 1955	85994	
100	Transistor Slowed-Down Video System	R. H. Baker R. E. McMahon A. J. Yakutis	22 Dec. 1955	92634	
101	An Investigation of a 2-Mcps Ground-Wave Radar for Ship Detection	J. T. deBettencourt D. J. Gray	13 Dec. 1955	90351	
102	Designing for Reliability	N. H. Taylor	9 Dec. 1955	93756	
†103	Some Notes on Jamming, I	W. L. Root	3 Jan. 1956	90352	

Technical Reports

TR No.			DDC No.	Hayden Serial and Prices
104	Random-Access PPI	E. W. Bivans B. Cohen R. W. Hofheimer K. E. Perry J. Terzian R. V. Wood, Jr.	24 Feb. 1956	92633
106	Transistor Regulated Power Supplies	F. G. Popp	19 Jan. 1956	92621
107	Some Fundamental Principles of Coherent MTI and AMTI	W. W. Ward W. B. Renhult	3 May 1956	100288
110	Maximum Efficiency Transistor Switching Circuits	R. H. Baker	22 Mar. 1956	96497
111	Characteristics of Simple Manual Control Systems	J. I. Elkind	6 Apr. 1956	94646
112	Analysis of Freezing Precipitation Along the Eastern North American Coastline	J. M. Austin § S. L. Hensel	23 Mar. 1956	96755
113	Broad-Band Balanced Duplexers	C. W. Jones	5 Apr. 1956	100287
†114	Markov-Process Representation of Radar Detection-Trial Binary-Data Sequences	G. C. Sponsler	16 Apr. 1956	100289 H-216 M \$1.50 P \$17.50
115	Galvanomagnetic Effects in n-Type Germanium	W. M. Bullis	14 May 1956	96499
116	Communication Through Noisy, Random-Multipath Channels	G. Turin	14 May 1956	96500
117	The Design of Characters for the Charactron	W. P. Harris B. F. Green, Jr. E. A. Wilson L. H. Liaudansky	8 May 1956	101142
119	Some Experiments with Three-Pulse Cancellation and with Sweep Integration	J. J. G. McCue	8 June 1956	103579
120	Symmetrical Back-Clamped Transistor Switching Circuits	R. H. Baker R. E. McMahon F. L. McNamara A. C. Parker V. J. Sferrino H. A. Ullman	5 May 1956	101141
123	A Mathematical Model for the Radar Echo from a Random Collection of Scatterers	E. J. Kelly E. C. Lerner	15 June 1956	104260

Technical Reports

TR No.				DDC No.	Hayden Serial and Prices
124	The Suggested Role of Stratified Elevated Layers in Trans-Horizon Short-Wave Radio Propagation	J. R. Bauer	24 Sept. 1956	110003	
†129	The Prediction of Ballistic Missile Trajectories from Radar Observations	I. I. Shapiro	27 Feb. 1957	110025	
130	High-Speed Graded-Base-Transistor Switching Circuits	R. H. Baker E. J. Chatterton A. C. Parker	10 Dec. 1957	110030	
132	On Meteor Echoes from Under-dense Trails at Very High Frequencies	M. Loewenthal	13 Dec. 1956	137608	
†133	Transistor Core Memory	R. E. McMahon F. L. McNamara	13 Nov. 1956	110010	H-485 M \$1.50 P \$6.15
134	Preliminary Report on Ground-Wave-Radar Sea Clutter	C. A. Stutt S. J. Fricker R. P. Ingalls M. L. Stone	21 Sept. 1956	110004	
135	Topics in the Design of Antennas for Scatter	J. Granlund	23 Nov. 1956	110001	
136	Classical Boltzmann Theory of Cyclotron Resonance	H. J. Zeiger B. Lax R. N. Dexter	4 Oct. 1956	110005	
137	Punch-Thru Diode (Operation as a Narrow-Base Diode)	R. H. Rediker D. E. Sawyer	27 Nov. 1956	110011	
138	Circular Polarization for the AN/CPS-18 Antenna	F. L. Niemann J. P. Curtis	7 Jan. 1957	137609	
†139	Logical Design of CG 24 (A General-Purpose Computer)	G. P. Dinneen J. A. Dumanian I. L. Lebow I. S. Reed P. B. Sebring	15 Apr. 1957	147496	H-19 M \$1.50 P \$15.40
141	Symbolic Design Techniques Applied to a Generalized Computer	I. S. Reed	3 Jan. 1957	110009	
142	High-Power RF Switch	L. J. Ricardi	10 Dec. 1956	110006	
143	Electromagnetic Propagation Effects in Ferromagnetic Resonance	M. H. Seavey P. E. Tannenwald	16 Jan. 1957	137610	

Technical Reports

TR No.			DDC No.	Hayden Serial and Prices
144	Analysis of Wet-Snow Precipitation Along the Eastern North American Coastline	J. M. Austin § S. L. Hensel	25 Jan. 1957	137711
146	High-Power TR Switch Development at UHF	R. E. Slattery	25 Jan. 1957	137712
150	Some Studies on Group III-V Intermetallic Compounds	C. R. Kolm	20 Feb. 1957	137716
151	Proposal for Improving Tropospheric Propagation	L. J. Eyges	1 Mar. 1957	137717
152	Hahn Decompositions and Hypothesis Tests	I. S. Reed E. J. Kelly D. H. Lyons	4 Mar. 1957	137718
153	Optical Memory Panels	W. L. Gardner D. B. Barker M. D. Zimmerman	7 Mar. 1957	137719
†154	Some Pulse-Doppler Radar-Design Considerations	R. E. Richardson	12 Aug. 1957	150863 H-482 M \$1.50 P \$5.40
155	A Fixed-Gap UHF TR Tube	C. W. Jones C. E. Muehe S. J. Miller	29 Mar. 1957	147407
156	Transistorized Matched Filter for Pulsed Sinusoids	P. L. Fleck, Jr.	12 Apr. 1957	147492
†157	Some Properties of Stationary Gaussian Processes	E. J. Kelly I. S. Reed	5 June 1957	150864 H-468 M \$1.50 P \$3.40
†158	The Detection of Radar Echoes in Noise. Part I: Statistical Preliminaries and Detector Design	I. S. Reed E. J. Kelly W. L. Root	20 June 1957	150865 H-238 M \$1.50 P \$7.90
†159	The Detection of Radar Echoes in Noise. Part II: The Accuracy of Radar Measurements	I. S. Reed E. J. Kelly W. L. Root	19 July 1957	150866 H-215 M \$1.50 P \$8.80
160	Ultrasonic-Delay-Line Terminating Circuits and Passband Measurements	M. Axelbank	12 July 1957	150867
†161	A Search for Means to Detect Distant Low-Flying Aircraft	E. W. Pike	18 July 1957	150868 H-28 M \$1.95 P \$33.60

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TR No.			DDC No.	Hayden Serial and Prices
162	Digital-Analog Function Generators	R. W. Hofheimer K. E. Perry	23 Aug. 1957	150869
164	The Chemical Analysis of Manganese-Magnesium Ferrite (Memory-Core Material)	D. G. Wickham	23 Aug. 1957	150870
*† 165	Computer Techniques for the Study of Patterns in the Electroencephalogram	B. G. Farley L. S. Frischkopf W. A. Clark, Jr. J. T. Gilmore, Jr.	6 Nov. 1957	110027 H-2 M \$1.50 P \$5.75
* 166	On the Statics and Dynamics of Magnetic Domain Boundaries	J. V. Harrington	13 Jan. 1958	110028
167	Parabolic-Cylinder Reflector Patterns	R. L. Pease	13 Nov. 1957	110029
168	On the Reciprocity of Rays Propagated Through a Horizontally Stratified Ionosphere	D. H. Archer	18 Dec. 1957	110032
169	A Broad-Band UHF Amplifier and Mixer	J. H. Phillips E. Maxwell	27 Dec. 1957	110033
170	A 64-Pole RF Coaxial Switch	L. J. Ricardi B. F. La Page	3 Jan. 1958	110035
171	An FM MTI Cancellation System	D. A. McKee	8 Jan. 1958	110036
172	Analysis of Some Detection Criteria for Pulse Radar	E. J. Kelly D. H. Lyons H. M. Jones L. S. Reed	24 Jan. 1958	110039
174	Straight Tapers in Rectangular Waveguides	T. J. Rey	10 Feb. 1958	110041
176	Theory of Nonreciprocal Ferrite Phase Shifters in Dielectric-Loaded Coaxial Line	K. J. Button	7 Mar. 1958	110044
177	One-Megacycle Silicon Transistor Circuits Applicable to Airborne Digital Systems	V. J. Sferrino W. G. Schmidt	10 Mar. 1958	110045
178	Elimination of a Type of Natural Clutter in L-Band Radars	R. E. Richardson J. M. Stacey H. M. Kohler F. R. Naka	15 Apr. 1958	133851
179	Semiconductor Delay Lines	J. J. G. McCue	15 Apr. 1958	110050
181	Effects of the Filter in Oscillator Synchronization	T. J. Rey	14 May 1958	133854

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TR No.			DDC No.	Hayden Serial and Prices
182	The Local Behavior of Solutions of the Two-Body Problem and Related Problems	J. J. Levin	16 June 1958	133855
183	The Stewart Air Force Base to North Truro Tropospheric-Scatter Communication System	G. L. Mellen D. H. Hamilton, Jr. J. P. Kelly W. E. Morrow, Jr.	18 July 1958	133863
184	Paraboloidal Reflector Patterns	R. L. Pease	5 Aug. 1958	133862
185	Final Engineering Report on Parabolic Torus Antenna System	L. J. Ricardi M. E. Devane	7 Aug. 1958	222288
†186	Radio Refraction in a Cool Exponential Atmosphere	J. R. Bauer W. C. Mason F. A. Wilson	27 Aug. 1958	202331 H-344 M \$1.50 P \$6.15
†187	Characteristics of Moon-Reflected UHF Signals	S. J. Fricker R. P. Ingalls W. C. Mason M. L. Stone D. W. Swift	22 Dec. 1958	204519 H-3 M \$1.50 P \$16.00
188	Digital Rate Synthesis for Frequency Measurement and Control	T. J. Rey	30 Oct. 1958	205596
189	Doppler Phase-Difference Integrator	G. M. Hyde K. E. Perry	12 Nov. 1958	206258
190	Twilight Region Propagation of Short Radio Waves by Modes Contained in the Normal Air	T. J. Carroll R. M. Ring	31 Oct. 1958	210005
†191	The Automatic Design of Logical Networks	T. C. Bartee	3 Dec. 1958	207170 H-27 M \$1.50 P \$8.50
192	The Conductance of a Slot in an Array Antenna	S. J. Rabinowitz	31 Dec. 1958	209908
193	Final Technical Report - Antenna and RF Circuit Design - Millstone Hill Radar	P. C. Fritsch	7 Jan. 1959	221688
194	Curved-Earth Computations for Airborne Early Warning and Control	N. Durlach A. Carpenter M. A. Herlin	13 Jan. 1959	210006
195	On $\sin x/x$ Sampling in the Case of Non-Band-Limited Functions	K. R. Johnson	16 Feb. 1959	211215

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TR No.			DDC No.	Hayden Serial and Prices
†197	The Magnetic Properties of Thin Films	J. B. Goodenough D. O. Smith	210730	H-26 M \$1.50 P \$13.00
198	Pressure Distribution, Stability, and Restoring Torque of an Externally Pressurized Bearing	R. A. Greenberg	212979	
199	Transistor Life Experience: 1954 - 1958	D. J. Eckl P. A. Fergus R. L. Burke	214565	
200	Preparation and Performance of Sintered CdS Photoconductors	R. R. Billups W. L. Gardner, Jr. M. D. Zimmerman	212580	
202	A Simple Null-Indicating Saturable-Core Magnetometer for the Detection of Static Magnetic Fields	E. P. McCurley C. Blake	215625	
203	The AN/FRC-47 (XD-1) Mock-Up System Performance Results	B. E. Nichols	216370	
204	A Probability Model for Coherent Phase-Only MTI Systems	J. W. McGinn, Jr.	220812	
205	Paraboloidal Reflector Patterns for Off-Axis Feed	S. S. Sandler	226245	
206	The ACM-52 Automatic Clutter Mapper and Preliminary Experimental Results	J. N. Harris E. J. Madle	230025	
207	A Method of Pulse Compression Employing Nonlinear Frequency Modulation	E. L. Key E. N. Fowle R. D. Haggarty	312903	
208	On the Band Structure of Transition Metals and Their Alloys	J. B. Goodenough	231241	
209	A Method of Side-Lobe Suppression in Phase-Coded Pulse Compression Systems	E. L. Key E. N. Fowle R. D. Haggarty	229403	
210	Studies in Partial Switching of Ferrite Cores	R. H. Tancrell R. E. McMahon	227928	
212	The Calliscope - A Versatile Alphanumeric Display	K. E. Perry E. J. Aho	232164	

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TR No.		DDC No.	Hayden Serial and Prices
217	Applications of Boolean Matrices to the Analysis of Flow Diagrams	R. T. Prosser	22 Jan. 1960
219	Stochastic Approximation and "Minimax" Problems	L. A. Gardner, Jr.	11 Apr. 1960
221	Transistor Life in the TX-O Computer After 10,000 Hours of Operation	D. J. Eckl R. L. Burke	14 Apr. 1960
223	Solid State Display Panels with Photoconductive Control	R. R. Billups J. Rotstein W. L. Gardner, Jr.	26 May 1960
224	Effects of Feed Displacement on Patterns of Parabolic-Cylinder Reflectors	R. L. Pease J. Pease	2 June 1960
226	Current-Operated Diode Logic Gates	H. Reinecke, Jr.	21 July 1960
227	Effect of Higher Spatial Modes on Predicted Multicavity Klystron Performance	R. L. Pease	25 July 1960
†228	Phased Array Radar Studies, 1 July 1959 to 1 July 1960	J. L. Allen W. W. Camp L. Cartledge W. P. Delaney J. DiBartolo M. Siegel S. Spoerri J. H. Teele D. H. Temme	12 Aug. 1960
*†231	Sequential Encoding and Decoding for the Discrete Memoryless Channel	B. Reiffen	12 Aug. 1960
234	Signal Processing in Radar Astronomy - Communication via Fluctuating Multipath Media	R. Price P. E. Green, Jr.	6 Oct. 1960
†236	Phased Array Radar Studies, 1 July 1960 to 1 July 1961	J. L. Allen L. Cartledge W. P. Delaney E. A. Davidson J. DiBartolo A. J. Fallo W. J. Ince M. Siegel J. R. Sklar S. Spoerri J. H. Teele D. H. Temme	13 Nov. 1961

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237	Remote Display Console for Computer Processed Data	H. E. Zieman D. I. Underwood	13 Jan. 1961	255086
239	Electromagnetic Theory of Spin Wave Resonance	M. H. Seavey, Jr.	15 Feb. 1961	255342
241	GENDARE (A Generalized Data Reduction System)	M. M. Marill J. B. Williams, Jr.	22 Jan. 1962	284041
246	A Threshold Theory for Phase-Locked Loops	H. L. VanTrees	22 Aug. 1961	266951
247	A Solid State Memory System Utilizing Impulse Switching of Ferrite Cores	V. J. Sferrino	22 Sept. 1961	264998
248	Application of the Resonant Cavity Method to the Measurement of Electron Densities and Collision Frequencies in the Wakes of Hypervelocity Pellets	M. Labitt M. A. Herlin	17 Oct. 1961	265867
249	Cyclotron Resonance and Magneto-Optical Effects in Semiconductors	B. Lax J. Halpern	30 Apr. 1962	278081
251	The DICON System	R. S. Berg D. B. Eshleman J. N. Harris R. M. Horowitz I. L. Lebow W. H. Long N. J. Morrisson, Jr. F. Nagy, Jr. N. L. Daggett, Editor	31 Oct. 1961	267536
252	Elementary Lattice Theories and Their Application to Gas Adsorption Phenomena	J. M. Honig	11 Dec. 1961	269570
253	Precision Frequency Control of a High-Power Millimeter Klystron	C. M. Steinmetz	3 Jan. 1962	273509
254	Ferro- and Antiferromagnetism in a Cubic Cluster of Spins	G. F. Dresselhaus	11 Jan. 1962	273950
255	A Diplexer Using Hybrid Junctions	L. J. Ricardi	7 Feb. 1962	274524
256	Radio-Echo Observations of the Moon at 3.6-em Wavelength	J. V. Evans	19 Feb. 1962	274669

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TR No.			DDC No.	Hayden Serial and Prices
257	Secondary Emission Characteristics of High-Power Microwave-Tube Surfaces	A. Vierstra R. C. Butman	20 Feb. 1962	282311
258	Error Probabilities for Adaptive Multichannel Reception of Binary Signals	R. Price	23 July 1962	284651
259	The West Ford Antenna Feed System	L. Niro	5 Mar. 1962	282311
261	Statistical Mechanical Theory of Magnetic Resonance	P. L. Kelley	1 May 1962	274740
263	The COBI Data Transmission Modem	K. H. Morey	23 May 1962	277501
264	A More Precise Analysis of Multicavity Klystrons. I. Solutions of the Boundary-Value Problem	R. L. Pease	28 Mar. 1962	275469
265	Mass Spectrographic Lines of the Elements	E. B. Owens A. M. Sherman	3 Apr. 1962	275468
266	Electromagnetic Studies of Ionized Wakes	E. L. Murphy S. Edelberg G. F. Pippert	20 Apr. 1962	282309
267	Magnetism and Crystal Structure in Nonmetals	J. B. Goodenough	24 Apr. 1962	284300
268	Calculation of the Surface Temperature of a Solid under Electron Bombardment	G. E. Vibrans	16 Nov. 1962	294645
269	The Preparation and Properties of Some Vanadium Spinels	D. B. Rogers	25 May 1962	282542
270	State Assignment Algorithm for Clocked Sequential Machines	M. I. Schneider	25 May 1962	286784
272	Radio-Echo Observations of the Moon at 68-cm Wavelength	J. V. Evans	22 June 1962	291102
273	Scattering of Electromagnetic Waves by an Eaton Lens	J. Rheinstein	28 June 1962	289380
274	Studies of the F-Region by the Incoherent Backscatter Method	J. V. Evans	24 July 1962	292730
275	RF Component Development for the DICON System	R. S. Berg B. Howland	3 Aug. 1962	291780

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TR No.			DDC No.	Hayden Serial and Prices
276	The El Campo Solar Radar Antenna	M. E. Devane A. R. Dion	17 Aug. 1962	292173
277	A Luneburg Lens as a Passive Reflector for Satellite Communication	R. N. Assaly	21 Aug. 1962	291781
278	The FX-1 Magnetic Film Memory	J. I. Raffel A. H. Anderson H. Blatt T. S. Crowther T. O. Herndon	27 Aug. 1962	292172
279	Studies in Search for a Conscious Evader	R. C. Norris	14 Sept. 1962	294832
280	Magnetic Properties of a Single Crystal of Manganese Phosphide	E. E. Huber, Jr.	18 Dec. 1962	296788
281	A Quantitative Examination of the Radar Resolution Problem	J. L. Allen	17 Sept. 1962	295573
282	Radar Astronomy Measurement Techniques	P. E. Green, Jr.	12 Dec. 1962	400563
283	A Data Processing Formalism	A. W. Armenti B. J. Schafer J. M. Winett	6 Nov. 1962	293995
284	Scattering from Density Fluctuations in a Plasma (Scattering and Absorption Cross Section)	M. S. Macrakis	22 Oct. 1962	291779
* 285	The Resistance of Bats to Jamming	D. R. Griffin § J. J. G. McCue A. D. Grinnell §	23 Oct. 1962	296493
286	The Measurement of Small-Signal Parameters of Transistors at VHF	B. L. Diamond	14 Nov. 1962	292731
287	Incoherent Scattering from a Plasma: I. The Electronic Spectrum; II. The Ion-Carried Spectrum	M. S. Macrakis	14 Nov. 1962	295092
288	Radio-Echo Studies of the Moon at 7.84-Meter Wavelength	J. V. Evans R. P. Ingalls	20 Nov. 1962	294008
289	Optimum Incorporation of External Observations with a Marine Inertial Navigation System	D. J. Sakrison	30 Nov. 1962	296787

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TR No.			DDC No.	Hayden Serial and Prices
290	The Spectra of the Radiation from the Trail of Hypervelocity Spheres in Argon	B. W. Bryant	11 Dec. 1962	296124
292	Orbital Scatter Channel Propagation Experiment	P. R. Drouilhet J. W. Craig P. L. Fleck W. B. Smith C. A. Wagner	21 Dec. 1962	401311
293	Chemical Behavior of Semiconductors	H. C. Gatos M. C. Lavine	2 Jan. 1963	401398
J 294	Photo-Ionized Cloud as Source for Decrease in Backscatter Cross Section of Re-entering Body	E. L. Murphy	17 Jan. 1963	401310
295	Energy-Band Calculations	F. W. Quelle, Jr.	17 Jan. 1963	404687
296	Sketchpad: A Man-Machine Graphical Communication System	I. E. Sutherland	30 Jan. 1963	404549
298	Some Tests of Ionization Gauges	F. T. Worrell	18 Feb. 1963	402407
†299	Phased Array Radar Studies, 1 July 1961 to 1 January 1963	J. L. Allen D. M. Bernella W. W. Carpenter W. P. Delaney J. DiBartolo A. J. Fallo H. J. Greenberger W. J. Ince M. Siegel S. Spoerri D. H. Temme L. Cartledge, Editor	20 Feb. 1963	417572
				H-558 M \$1.50 P \$22.60
300	The Diamond Circuit	R. H. Baker R. E. McMahon R. G. Burgess	30 Jan. 1963	400955
301	Optimum Power Division in Coherent Communication Systems	H. L. VanTrees	19 Feb. 1963	406882
302	Antiferromagnetic Resonance Linewidth in MnF ₂ Near the Transition Temperature	J. C. Burgiel	18 June 1963	420809
303	Specimen Preparation by Spark-Erosion Cutting	H. H. Ehlers D. F. Kolesar	14 Mar. 1963	402938

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TR No.				DDC No.	Hayden Serial and Prices
304	Mode Theory of the Active Magnetohydrodynamic Waveguide	J. R. Cogdell	2 July 1963	423408	
305	Improvement of the Measurement Capability of the UHF Radar at Wallops Island	J. Freedman, Editor	10 Apr. 1963	417559	
306	The Baseball Program: An Automatic Question-Answerer, Vols. I, II	A. K. Wolf C. S. Chomsky B. F. Green, Jr.	11 Apr. 1963	432038	
307	The Measurement of Electron Density in the Wake of a Hypervelocity Pellet Over a Six-Magnitude Range	M. Labitt	15 Apr. 1963	421762	
308	Computation of the Spreading of an Electron Beam Under Acceleration and Space-Charge Repulsion	G. E. Vibrans	18 Apr. 1963	409705	
310	A Fourier Theorem and Its Application to the Measurement of Electromagnetic Fields and Quantum Mechanical States	H. E. Moses J. S. Lomont	30 Apr. 1963	407604	
312	Magnetic Scattering of Neutrons by Hexagonal Cobalt	R. M. Moon, Jr.	9 May 1963	413566	
313	The Guide Wavelength of Cylindrical Waveguide of Arbitrary Cross Section and a Computer Program for Calculating Values	R. N. Assaly	20 May 1963	412518	
315	Machine Perception of Three-Dimensional Solids	L. G. Roberts	22 May 1963	413529	
316	Calculation of Potential Depression in Klystron Gaps	R. L. Pease	23 May 1963	417589	
318	Coding for Tracking Radar Ranging	T. C. Bartee P. E. Wood, Jr.	11 June 1963	416649	
319	Radar Range Equations for Narrow-Band Optical Sources	B. S. Goldstein	14 June 1963		
320	Growing Helical Density Waves in Semiconductor Plasmas	C. E. Hurwitz	17 Oct. 1963	432393	
321	A Linear-FM Radar Pulse Compression System Employing Thickness-Tapered Dispersive Delay Lines	R. C. Yost	11 July 1963	417528	

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TR No.			DDC No.	Hayden Serial and Prices
322	Properties of Dielectrics from Reflection Coefficients in One Dimension	H. E. Moses C. M. deRidder	11 July 1963	422444
† 323	The Theory of Array Antennas (with Emphasis on Radar Applications)	J. L. Allen	25 July 1963	422945 H-563 M \$1.50 P \$11.20
324	Investigation of Effects of Surface Deviations on Haystack Antenna Radiation Patterns	A. R. Dion	29 July 1963	418740
325	Detection of the Energy Peak of an Arbitrary Signal	L. Kleinrock	23 Aug. 1963	425894
326	Translationally Covariant Hamiltonians	H. E. Moses J. S. Lomont	26 Aug. 1963	422500
328	Haystack Antenna System Status Report	A. O. Kuhnel	13 Sept. 1963	600930
329	The Reduction of Electromagnetic Backscatter from a Plasma-Clad Conducting Body	E. L. Murphy	23 Sept. 1963	430589
330	Radiometric Measurements at 8.5-mm Wavelength with a 28-Foot Antenna During December 1962	V. L. Lynn M. D. Sohigian M. L. Meeks	8 Oct. 1963	430926
331	Radar Observations of the Moon at 8.6-mm Wavelength	V. L. Lynn M. D. Sohigian E. A. Crocker	8 Oct. 1963	426207
332	Radio-Echo Studies of Meteors at 68-cm Wavelength. Part I: Sporadic Meteors	J. V. Evans R. A. Brockelman	29 Oct. 1963	439354
335	Millstone Hill Radar Station Results of Long-Baseline Radar Interferometer Studies	E. Gehrels	7 Nov. 1963	438425
337	Mariner A Plasma Probe	H. S. Bridge § B. Rossi § F. Scherb § R. H. Baker R. S. Cuikay E. F. Lyon, III	5 Dec. 1963	
338	The West Ford Antenna System	B. F. La Page	6 Dec. 1963	438879

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<u>TR No.</u>			<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
339	Signal Parameter Estimation for Seismometer Arrays	E. J. Kelly M. J. Levin	8 Jan. 1964	435489
341	Radio-Echo Studies of Meteors at 68-cm Wavelength. Part II: Shower Meteors	J. V. Evans R. A. Brockelman	17 Jan. 1964	601518
342	Measurement of the Diameter of the Electronic Wake of the Hypersonic Pellets	M. Labitt	20 Jan. 1964	438816
343	Project West Ford Payload Telemetry System	W. T. Higgins L. A. Jacobson J. B. Rankin	20 Jan. 1964	602928
344	Information Capacity and Quantum Effects in Propagation Circuits	T. Hagfors	24 Jan. 1964	436639
345	Interpretation of the Magnetic and Crystallographic Properties of Compounds with the B31 Structure	J. B. Goodenough	28 Jan. 1964	435758
346	The Orthomatch Data Transmission System	B. G. Kuhn	20 Feb. 1964	602130
347	Probability Distribution of Antenna Gain for Satellite with Switched Antenna System	R. N. Assaly	4 Feb. 1964	602484
348	A More Precise Analysis of Multicavity Klystrons. II. Prediction of Electronic Conductance and Over-All Gain	R. L. Pease	14 Feb. 1964	441855
349	Radar Scattering from a Conducting Cone-Sphere	J. H. Pannell J. Rheinstein A. F. Smith	2 Mar. 1964	600411

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No.				DDC No.	Hayden Serial and Prices
21G-0001	Flexowriter and Ampex Tape Terminal Input Equipment for IBM-709 Computer	J. R. Brown	26 Aug. 1959	235248	H-63 M \$1.50 P \$8.20
21G-0003 (Rev. 1)	Wallops Island Preliminary Processing Computer Programs	S. M. Ornstein	25 July 1960	243045	H-158 M \$1.50 P \$8.20
21G-0003 (Rev. 2)	Wallops Island Preliminary Processing Computer Programs	S. M. Ornstein R. J. Saliga	23 Jan. 1961	250959	H-253 M \$1.50 P \$8.20
21G-0004	Oscilloscope Cameras for Video Recording - Reentry Physics Program	E. E. Schowengerdt	13 Mar. 1961		H-471 M \$1.50 P \$5.40
21G-0005	Automatic Range Tracking System for the Reentry Physics Program	J. E. Gillis	17 Feb. 1960	242887	H-159 M \$1.50 P \$12.70
21G-0006	Primary Recording Instrumentation for Re-entry Physics Program	E. J. Peters	20 Feb. 1961	263517	H-342 M \$1.50 P \$18.90
21G-0007	Backup Recording Instrumentation for Reentry Physics Program	K. H. Morey	18 May 1960	241800	H-145 M \$1.50 P \$10.60
21G-0008	Scanback Antenna Control for Reentry Physics Program	A. H. Flink	5 July 1961		H-472 M \$1.70 P \$24.90
21G-0009	Real Time Clock and Teletype Data Transmitter for Reentry Physics Program	R. M. Martinson	5 July 1960	242888	H-156 M \$1.50 P \$21.70
21G-0011	UHF Radar for Reentry Physics Program	B. G. Kuhn	19 Sept. 1960	244586	H-182 M \$1.50 P \$24.70
21G-0013	X-Band Radar for Reentry Physics Program	J. Sobolewski F. J. Dominick E. E. Schowengerdt L. C. Wilber	7 Dec. 1960	252043	H-262 M \$1.50 P \$25.90
21G-0015	Amplitude Calibration for Reentry Physics Program Arbuckle Neck Radars	B. G. Kuhn	19 Sept. 1960	245324	H-192 M \$1.50 P \$13.90

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No.			DDC No.	Hayden Serial and Prices
†21G-0016	Procedures for Operating Parametric Amplifier in Reentry Physics Program	F. R. Hutchinson F. J. Dominick R. H. Kingston L. C. Wilber E. E. Schowengerdt	28 July 1960	243636 H-165 M \$1.50 P \$6.40
21G-0017	Anelex Printout System for Reentry Physics Program	E. J. Peters	21 Aug. 1961	263249 H-336 M \$1.50 P \$8.65
21G-0018	Specifications for Needles Filter Program Package	F. E. Heart	7 Apr. 1960	244493 H-180 M \$1.50 P \$4.90
†21G-0019	Specification for Needles Statistical Orbit Prediction Program	W. R. Crowther	20 Apr. 1960	244494 H-181 M \$1.50 P \$1.60
21G-0021	An Introduction to Digital Techniques	R. M. Martinson	20 May 1960	H-473 M \$1.50 P \$13.90
21G-0022	Specifications for Teletype Tape Checking Procedure	S. M. Ornstein	16 June 1960	240171 H-130 M \$1.50 P \$4.00
21G-0022 (Suppl. 1)	Revision of West Ford TTY Checking Program	J. D. Drinan	2 Aug. 1962	283778
21G-0024	West Ford Primary Print Program	J. D. Drinan	24 Jan. 1961	250958 H-250 M \$1.50 P \$4.00
21G-0024 (Suppl. 1)	West Ford Primary Print Program	J. D. Drinan	2 Aug. 1962	286367
21G-0026	West Ford Coordinate Conversion Program	W. R. Crowther	1 Nov. 1960	246188 H-210 M \$1.50 P \$3.10
21G-0027	West Ford Statistical Orbit Prediction Program	W. R. Crowther	2 Nov. 1960	246778 H-221 M \$1.50 P \$2.80
21G-0028	West Ford Orbit Determination	A. A. Mathiasen	2 Nov. 1960	246777 H-222 M \$1.50 P \$6.70
21G-0029	Reliability of Redundant Computers	R. Teoste	22 Mar. 1961	260494 H-321 M \$1.50 P \$21.15
21G-0031	Specification for West Ford Pointing Program	F. E. Heart	20 July 1961	261181 H-326 M \$1.50 P \$6.40

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No.				DDC No.	Hayden Serial and Prices
21G-8001	Some Reliable Redundant Circuits	R. Teoste	7 June 1962	284793	H-423 M \$1.50 P \$7.65
21G-1	Programmed Satellite Pass Calculations	A. A. Mathiasen	28 June 1962	282041	H-414 M \$1.50 P \$14.90
21G-2	Project 861 Computer Programming System; Mathematical Analysis for Computation of Radar Pointing Data	Group 21	14 Sept. 1962	286547	H-434 M \$1.50 P \$13.15
21G-3	Project 861 Computer Program System; Auxiliary Programs and Techniques	J. D. Drinan A. A. Mathiasen	6 Sept. 1962	285046	H-426 M \$1.50 P \$6.90
21G-4	Project 861 Orbit Programs	A. A. Mathiasen W. R. Crowther	31 Aug. 1962	285045	H-425 M \$1.50 P \$14.40
21G-6	Project 861 Computer Program System; Pointing Program Notes	D. M. Hafford	21 Nov. 1962	290802	H-455 M \$1.50 P \$4.65
21G-7	Project 861 Computer Program System; Venus Pointing Data	J. D. Drinan	19 Nov. 1962	291230	H-459 M \$1.50 P \$6.90
21G-8	SICOSAS, an IBM 7090 Computer Assembly Program for the CDC 160-A Computer	J. D. Drinan	17 Jan. 1963	295693	H-469 M \$1.70 P \$24.65
† 22G-0002	An Algorithm for Assembling a Simple Tabular Report	P. R. Bagley	14 July 1959	230435	H-33 M \$1.50 P \$6.70
† 22G-0004	Approximations to Model Atmospheres	A. P. Ogg	10 Nov. 1959	230436	H-34 M \$1.50 P \$7.60
† 22G-0005	A Catalog of Tangent Rays	F. H. Ditto	12 Aug. 1959	230433	H-35 M \$1.50 P \$15.70
† 22G-0006	Sub-Program Storage Within a Digital Computer: A Cargo-Loading Problem	A. A. Grometstein	18 Aug. 1959	230437	H-36 M \$1.50 P \$5.50
† 22G-0009	A Facility for Automatic Construction of Large Program Systems	C. W. Uskavitch	29 Sept. 1959	234248	H-56 M \$1.50 P \$14.20

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No.				DDC No.	Hayden Serial and Prices
† 22G-0011	An Efficient Iterative Procedure for Locating the Optimum Operating Point of a Noisy System	H. J. Kushner	7 Dec. 1959	233269	H-47 M \$2.35 P \$20.80
† 22G-0012	Program Description and Operating Manual for PAVEG (Position and Velocity Error Generator)	D. L. Lovenirth	14 Dec. 1959	244403	H-178 M \$1.50 P \$7.60
† 22G-0014	Applications of Boolean Matrices to the Analysis of Flow Diagrams	R. T. Prosser	21 Dec. 1959	230434	H-37 M \$1.50 P \$4.30
22G-0017	Macro Library for Easier Coding	J. S. Heart	15 Jan. 1960	233267	H-48 M \$1.50 P \$7.30
22G-0018	Introduction to an Investigation of a Technique for Smoothing Radar Returns from an Artificial Earth Satellite	F. Levine	15 Jan. 1960	233268	H-49 M \$1.50 P \$8.80
22G-0019	Preliminary Description of GENDARE	J. B. Williams, Jr.	15 Jan. 1960	233270	H-50 M \$1.50 P \$4.90
22G-0020	The GENDARE Identification Function	M. M. Daley	15 Jan. 1960	233265	H-51 M \$2.35 P \$19.90
22G-0021	On the Linear Smoothing of Redundant Radar Data from Satellites	F. C. Scheweppe	25 Aug. 1960	243042	H-154 M \$1.50 P \$18.40
† 22G-0024	Analysis and Design of Simple Nonlinear Noise Filters	R. W. Sittler	5 Feb. 1960		H-46 M \$1.70 P \$29.80
22G-0025	The Design of a Language for Simplex System Users	D. Reiner	10 Mar. 1960	236233	H-83 M \$1.50 P \$7.90
22G-0027	Specifications and Operating Instructions for the OPERA	H. D. Friedman	4 Apr. 1960	236231	H-80 M \$1.50 P \$7.90
† 22G-0029	Decoding of Group Codes for Binary Symmetric Channels	W. I. Wells	21 Mar. 1960		H-70 M \$1.80 P \$31.30
22G-0034	On the Consistency of the Photon-Electron System - II	R. T. Prosser	6 June 1960	238064	H-112 M \$1.50 P \$10.60

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No.			<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
22G-0035	A Method for Locating the Maximum of a Function of a Single Variable in the Presence of Noise	R. C. Norris	20 Oct. 1960	245804 H-207 M \$1.50 P \$12.10
22G-0036	Classification of Binary Sequences	W. I. Wells	10 May 1960	236796 H-95 M \$1.50 P \$3.40
22G-0038	A Method for Computing Keplerian Orbit Parameters from Two Positions with Times	A. P. Ogg	9 June 1960	238062 H-113 M \$1.50 P \$4.60
22G-0039	Some Results of Estimating Satellite Elements from Millstone Hill Averaged Data	H. D. Friedman	2 Nov. 1960	246781 H-217 M \$1.50 P \$10.60
22G-0041	Routing Procedures in Communications Networks. Part I: Random Procedures	R. T. Prosser	12 July 1960	241408 H-135 M \$1.50 P \$12.70
22G-0042	GENDARE System – Fundamental Concepts of Logic and Structure	J. B. Williams, Jr.	17 Oct. 1960	245234 H-195 M \$1.50 P \$6.70
22G-0043	Efficient Iterative Methods for Optimizing the Performance of Multi-Parameter Noisy Systems	H. J. Kushner	20 Oct. 1960	245802 H-205 M \$1.50 P \$23.50
22G-0046	An Empirical Investigation of Procedures for Locating the Maximum Peak of a Multiple-Peak Regression Function	E. J. Magee	20 Oct. 1960	245672 H-206 M \$1.50 P \$10.60
22G-0051	On the Behavior of the Geometric Genus Under Ground Field Extension	P. L. Falb	20 Oct. 1960	245548 H-202 M \$1.50 P \$4.00
22G-0052	On Determining the Ratio Between the Area of an Elliptical Sector and Its Triangle Approximation	R. Crittenden E. Dubinsky H. D. Friedman	18 May 1961	257640 H-308 M \$1.50 P \$6.65
22G-0053	Concepts of Automatic Data Storage and Retrieval in the Simplex System	C. W. Uskavitch	17 Oct. 1960	245472 H-201 M \$1.50 P \$21.10
22G-0054	A Survey of the Simplification of Truth Functions	W. Draisin	20 Oct. 1960	245231 H-193 M \$1.50 P \$6.10

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No.			DDC No.	Hayden Serial and Prices
22G-0055	A Sequential Procedure for Sampling the Population with the Maximum Mean	H. J. Kushner	23 Feb. 1961	252047 H-263 M \$1.50 P \$5.20
22G-0061	A Number of Results from Studies of Digital Filtering and the Convergence of Iterative Techniques	R. Crittenden E. Dubinsky D. Lubell F. C. Schweppe	1 June 1961	257461 H-306 M \$1.50 P \$13.15
22G-0071	Movement of Military Operations-Centers or Other Military Installations as Safeguard Against Nuclear Attack	J. H. Halberstein	14 May 1961	259667 H-317 M \$1.50 P \$8.15
† 22G-1	Movement of Military Centers as Safeguard Against Nuclear Attack, Part II	J. H. Halberstein	12 June 1962	285044 H-427 M \$1.50 P \$15.15
22G-2	Methods for the Adaptive Optimization of Binary Detection Systems	H. J. Kushner	9 Nov. 1962	290741 H-448 M \$1.50 P \$14.90
22G-3	Partial Differential Equations: First-Order Theory in One Dependent Variable – Deterministic Case	P. L. Falb	27 Nov. 1961	268122 H-368 M \$1.50 P \$6.90
22G-4	On Optimal Linear Control Systems Which Minimize the Time Integral of the Absolute Value of the Control Function (Minimum-Fuel Control Systems)	M. Athanassiades	10 May 1962	276881 H-404 M \$1.50 P \$23.65
† 22G-5	Newtonian Drag Coefficients and Weights for Blunted Cone-Spheres at Small Angles of Attack	A. Freed	30 Mar. 1962	275055 H-398 M \$1.50 P \$6.90
22G-6	The Local Behavior of Circular Orbits	F. C. Schweppe	23 Feb. 1962	272869 H-380 M \$1.50 P \$4.90
22G-7	A Model for the Study of Communications Degradation	K. M. Sayre	29 Mar. 1962	274739 H-397 M \$1.50 P \$17.65
22G-8	Time-Optimal Velocity Control of a Spinning Space Body	M. Athanassiades P. L. Falb	6 Sept. 1962	284207 H-422 M \$1.50 P \$11.40
22G-9	Time- and Fuel-Optimal Attitude Control	M. Athans	23 May 1963	407437 H-518 M \$1.50 P \$6.60

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No.				<u>DDC No.</u>	Hayden Serial and Prices
22G-10	Reduction of Computational and Data Transmission Requirements for Trajectory Estimation Using Multiple Sites	F. C. Scheppe	23 Aug. 1963	416742	H-533 M \$1.50 P \$4.20
22G-13	Newtonian Drag of Coated Cylinders	A. Freed	7 Jan. 1963	296790	H-480 M \$1.50 P \$6.15
22G-15	An Introduction to Estimation Theory for Dynamical Systems	F. C. Scheppe	28 Aug. 1963	417777	H-538 M \$1.50 P \$10.60
22G-16	Tables of the Amplitude and Phase of the Backscatter from a Conducting Sphere	J. Rheinstein	19 June 1963	409820	H-522 M \$1.50 P \$9.60
† 24-54	Phone Line Data Transmission Systems	K. E. Perry	Sept. 1955		H-106 M \$1.50 P \$5.20
† 2G-24-83	Magnetic Core SDV	F. L. McNamara	23 Dec. 1957	246780	H-218 M \$1.50 P \$13.90
2G-25-4	Error Statistics on Dual A-1 Digital Data Transmission Circuits from Kingston, New York to Cape Canaveral, Florida	E. J. Hofmann G. E. Masters §	6 June 1958	244772	H-185 M \$2.05 P \$37.30
† 2G-25-12	Error Statistics on Dual A-1 Digital Data Transmission Circuits from Lexington, Massachusetts to So. Truro, Massachusetts	E. J. Hofmann	Feb. 1959		H-169 M \$1.50 P \$25.60
25G-0001	Design and Analysis of Circuitry for a Matched Filter System	W. A. Petersen	5 Aug. 1960	244771	H-183 M \$1.50 P \$10.30
25G-0002	Reflections from Spheroids	D. Parker	19 Feb. 1960	236594	H-88 M \$1.50 P \$4.60
† 25G-0003	Measurement of Time Varying Telephone Line Characteristics	R. G. Gallager	Sept. 1959	230432	H-38 M \$1.50 P \$4.00
25G-0004	The Characterization of Channels with Rapid Multiplicative Perturbations	H. Sherman	26 Aug. 1960	243044	H-155 M \$1.50 P \$15.70

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No.			DDC No.	Hayden Serial and Prices
25G-0005	Error Statistics on Dual Data Circuits from Kingston, New York to Cape Canaveral, Florida	E. J. Hofmann	20 Oct. 1960	245991 H-208 M \$1.50 P \$12.40
25G-0006	Error Statistics on the Hawaiian Cable	E. J. Hofmann	19 Feb. 1960	236595 H-89 M \$1.50 P \$6.40
25G-0007	A Converter for AN/GSC-4 Connection to the Automatic Digital Data Error Recorder	W. G. Schmidt	29 Jan. 1960	236596 H-90 M \$1.50 P \$5.20
25G-0008	RANDWORD Circuitry and Circuit Characteristics	W. G. Schmidt	20 July 1960	240417 H-132 M \$1.50 P \$12.70
25G-0010	Error Statistics on a Long-Haul Looped Telephone Circuit Utilizing the Milgo Data System	E. J. Hofmann P. L. Grant	17 June 1960	240820 H-134 M \$1.50 P \$15.10
25G-0012	Impulse Noise on an H-44 Telephone Circuit Looped from Lexington, Massachusetts via West Haven, Connecticut	R. Pfeiffer H. Yudkin	Apr. 1960	236232 H-79 M \$1.50 P \$13.00
25G-0013	A Proposal for Long Range Communications Between Ground and Low-Orbiting Satellites	M. S. Macrakis	19 Feb. 1960	237120 H-104 M \$1.50 P \$8.20
25G-0014	Bermuda to New York Radio Teletype Reliability Tests	R. E. Greim	10 Mar. 1960	237123 H-99 M \$1.50 P \$9.40
25G-0015	Study of Torsional Waves in a Laminated Elastic Rod	M. S. Macrakis	27 May 1960	237853 H-111 M \$1.50 P \$16.00
25G-0017	Reliability Modifications to the ADDER and Kineplex Converter	E. J. Hofmann P. L. Grant W. A. Petersen W. G. Schmidt	25 Aug. 1960	242596 H-149 M \$1.50 P \$4.90
† 25G-0019	TRANSWORD - A Portable Word Generator for Use in Measurement of Bit Error Distribution	W. G. Schmidt	19 Oct. 1960	245232 H-194 M \$1.50 P \$3.70
25G-0021	Determination of R_{cutoff} for the Asymmetric Channel	B. Reiffen	24 Oct. 1960	246372 H-214 M \$1.50 P \$6.40
25G-0021 (Rev. 1)	Determination of R_{cutoff} for the Asymmetric Channel	B. Reiffen	3 Mar. 1961	252498 H-267 M \$1.50 P \$5.50

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No.				DDC No.	Hayden Serial and Prices
25G-0022	The Design of Data Transmission Systems	R. G. Enticknap R. M. Lerner	4 Oct. 1960	243926	H-167 M \$1.50 P \$7.60
25G-0024	Error Statistics on the Collins Kineplex Over Various Media	E. J. Hofmann P. L. Grant E. H. Harvey	12 Jan. 1961	251447	H-257 M \$1.50 P \$19.30
25G-0025	Error Statistics Utilizing the Milgo Data System Over Various Media	E. J. Hofmann P. L. Grant	23 Jan. 1961	251510	H-258 M \$1.50 P \$21.10
25G-0026	Error Statistics Utilizing the Code Translation Data System Over Various Media	E. J. Hofmann	28 Mar. 1961	254037	H-278 M \$1.50 P \$38.20
25G-0028	Collected Error Statistics Utilizing Four Modems Over Various Telephone Circuits	E. J. Hofmann	23 Jan. 1961	251571	H-259 M \$1.50 P \$7.30
25G-0032	The Design of Band Separation Filters	A. I. Grayzel	4 Jan. 1961		H-235 M \$1.50 P \$18.10
25G-0033	Cerenkov Radiation and Millimeter Wave Applications (Part A)	M. S. Macrakis	3 May 1961	256271	H-297 M \$1.50 P \$11.65
25G-0035	Specifications for a COBI Data Transmission Modern	E. J. Hofmann	18 July 1961	261546	H-327 M \$1.50 P \$13.15
25G-0037	Error Statistics of A-1 Digital Data Signaling Equipment over Various Media	P. L. Grant	15 Sept. 1961	264332	H-348 M \$1.50 P \$31.40
† 25G-1	A Lower Bound for the Sum of Independently Distributed Continuous Random Variables	B. Reiffen	27 Oct. 1961	266826	H-357 M \$1.50 P \$2.90
† 25G-2	Sequential Decoding for Binary Channels with Noise and Synchronization Errors	R. G. Gallager	27 Oct. 1961	266879	H-356 M \$1.50 P \$8.65
25G-3	Applicability of Coding to Radio Teletype Channels	A. B. Fontaine	27 Oct. 1961	266827	H-355 M \$1.50 P \$4.40
25G-4	Experiments in the Improvement of the Impulse Response of Telephone Circuits	H. L. Yudkin	27 Nov. 1961	269557	H-373 M \$1.50 P \$7.90

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No.			DDC No.		Hayden Serial and Prices
25G-5	Automatic Error-Detection System for Toll-Grade Telephone Circuit Data Transmission	W. G. Schmidt	27 Nov. 1961	268128	H-367 M \$1.50 P \$7.90
25G-6	Matching and Error Counter	L. Staaf E. J. Hofmann	5 Dec. 1961	268704	H-369 M \$1.50 P \$5.65
25G-7	Semi-Automatic RANDWORD Printed Circuit Tester	C. A. Hoover	27 Nov. 1961	268703	H-370 M \$1.50 P \$8.40
25G-8	COBI Data Transmission Testing in the United Kingdom	P. L. Grant	27 Mar. 1962	275152	H-400 M \$1.50 P \$6.90
25G-9	Transmission Testing on Alaskan Forward-Propagation Tropospheric Scatter Circuits	P. L. Grant	29 May 1962	282040	H-413 M \$1.50 P \$14.40
25G-10	Revised RANDWORD Circuitry and Circuit Characteristics	W. G. Schmidt	21 Aug. 1962	289379	H-447 M \$1.50 P \$21.90
25G-11	Data Transmission Testing from Donnelly Flats, Alaska to Sunnyvale, California over a Network of Carrier Equipment	P. L. Grant	21 Feb. 1963	402067	H-490 M \$1.50 P \$8.65
25G-12	Data Transmission Testing from Donnelly Flats, Alaska to Sunnyvale, California over a TD-2 Microwave Circuit	P. L. Grant	29 Nov. 1962	294849	H-465 M \$1.50 P \$7.15
25G-13	Non-linear Effects in a Plasma	M. S. Macrakis	8 Jan. 1963	295690	H-467 M \$1.50 P \$5.40
25G-14	Error Statistics and Coding for Digital Data Transmission over Telephone and Teletype Circuits	A. B. Fontaine	21 Jan. 1963	298114	H-481 M \$1.50 P \$5.40
25G-15	Blocks in Error and Pareto's Law	B. J. Moriarty	28 Jan. 1963	296490	H-475 M \$1.50 P \$2.15
† 25G-16	An Optimum Demodulator for Poisson Processes: Photon Source Detectors	B. Reiffen H. Sherman	20 Feb. 1963	401752	H-500 M \$1.50 P \$4.20

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No.				DDC No.	Hayden Serial and Prices
25G-17	Some Experimental Results for a Sequential Decoding Algorithm Applied to an Asymmetric Channel	B. Reiffen D. Wiggert	12 Feb. 1963	400616	H-488 M \$1.50 P \$12.15
25G-19	Delay in Data Transmission Through Simple Networks: Steady State Characteristics with Infinite Nodal Storage	B. J. Moriarty	6 June 1963	408250	H-510 M \$1.50 P \$9.80
25G-20	Thresholds for Several Analog Modulation Systems	B. Reiffen	6 May 1963	404621	H-516 M \$1.50 P \$5.80
26G-1	Uniform Oscillations from Infrared Masers (12 September 1961)	J. R. O'Connor H. A. Bostick D. B. Barker §	8 Jan. 1962	270662	H-376 M \$1.50 P \$3.15
28G-1	A Note on the Multiple Zeros of Random Polynomials	J. C. Fogarty J. Max	31 Aug. 1962	283777	H-420 M \$1.50 P \$4.90
28G-3	A Random Acceleration Model for Filtering Polynomial-Like Signals	L. E. Jones F. C. Schweppe	25 Oct. 1963	423431	H-548 M \$1.50 P \$8.40
3G-0002	The Distribution of Electrons in the Upper Ionosphere from Backscatter Observations	J. V. Evans	23 Nov. 1960	247860	H-255 M \$1.50 P \$7.00
3G-0002 (Suppl. 1)	The Distribution of Electrons in the Upper Ionosphere from Backscatter Observations	J. V. Evans	3 Apr. 1961	254143	H-280 M \$1.50 P \$3.70
3G-0003	Radio Communication Using Moon Reflected Signals	J. V. Evans	19 Dec. 1960	249355	H-237 M \$1.50 P \$10.60
3G-0004	The Scattering Properties of the Lunar Surface at Radio Wavelengths	J. V. Evans	10 Jan. 1961	250684	H-248 M \$1.50 P \$15.70
30-0001	Millstone Observations on NASA Shotput II Balloon, 16 January 1960, and Preliminary Conclusions	Group 314	29 Jan. 1960	235667	H-65 M \$1.50 P \$4.60
30-0002	Millstone Observations During the NASA Shotput III Experiment, 27 February 1960	P. B. Sebring	2 Mar. 1960	235668	H-66 M \$1.50 P \$6.10
30-0003	A Preliminary Investigation of Meteor Echoes at UHF	G. H. Pettengill V. C. Pineo	16 Mar. 1960	235669	H-67 M \$1.50 P \$3.70

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No.				DDC No.	Hayden Serial and Prices
30G-0004	Millstone Observations During the NASA Shotput IV Experiment	D. P. Hynek	29 Apr. 1960	236129	H-85 M \$1.50 P \$5.20
† 30G-0005	Millstone Hill Radar Station - A Summary of Millstone Hill Results for the TIROS I Satellite Launching	G. H. Pettengill	16 May 1960	237124	H-100 M \$1.50 P \$9.70
30G-0007	Millstone Operations Related to the Pioneer V Space Probe	R. R. Silva	23 June 1960	239345	H-117 M \$1.50 P \$5.80
30G-0009	Coding Instructions for Floating Point Trigonometric, Inverse Trigonometric, Hyperbolic and Exponential Functions	B. A. Jensen	1 Nov. 1960	246189	H-212 M \$1.50 P \$3.10
30G-0010	Digital Tracking Loop for High-Powered, Experimental Radar	E. C. Fraser	12 Sept. 1960		H-171 M \$1.50 P \$25.90
30G-0011	Lunar Communication Test Summary - 1959	P. B. Sebring	28 Sept. 1960	244207	H-170 M \$1.50 P \$3.70
30G-0014	Distribution of Electrons in the F Region	J. V. Evans	15 Sept. 1961	263902	H-345 M \$1.50 P \$9.90
30G-2	Radar Cross-Section Observations of the Echo I Communications Satellite	D. P. Hynek	19 Feb. 1962	274065	H-393 M \$1.50 P \$24.15
† 31-148	Communication System for a Mars Reconnaissance Vehicle	M. I. Skolnik L. Cartledge L. J. Ricardi	14 May 1959	239073	H-166 M \$1.50 P \$17.50
† 31-150	The Autocovariance Filter	J. L. Allen	10 Aug. 1959	236168	H-72 M \$1.50 P \$18.70
32-24	An Analysis of Angular Accuracies from Radar Measurements	R. Manasse	6 Dec. 1955	236166	H-75 M \$1.50 P \$4.30
† 32-25	The Application of the Theory of Signal Detectability to Signals with Unknown Polarization and Phase	R. Manasse	20 Aug. 1956	236167	H-10 M \$1.50 P \$8.50
32-26	The Performance of Post-Detection Integrators for the Detection of a Sine Wave in Noise at Low Input Signal-to-Noise Ratio	R. Manasse	28 Nov. 1956	236234	H-76 M \$1.50 P \$7.90

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No.				<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
† 32-105	A New Phone Line Data System for Use in SAGE	K. E. Perry	1 May 1958	230115	H-30 M \$1.50 P \$13.90
32G-2	Preliminary Study of the Effect of Ozone on Atmospheric Transmission in the Range 0.25 Micron to 0.60 Micron	J. H. Meyer R. E. Newell §	19 Feb. 1963	402842	H-506 M \$1.50 P \$5.80
33-9	Observations at Round Hill on Shot Put II	L. P. Rainville	1 Mar. 1960	235246	H-62 M \$1.50 P \$9.10
33G-0014	Convection and Diffusion of Ionization in the E-Layer	H. Feshbach F. Villars	1 Dec. 1960	248362	H-229 M \$1.50 P \$15.40
† 33G-0015	Precision Tropospheric Radio Refraction Corrections for Ranges from 10 - 500 Nautical Miles	J. R. Bauer F. A. Wilson	20 Feb. 1961	252572	H-270 M \$1.50 P \$14.80
33G-1	Programming for the Group 33 Analog-to-Digital Conversion System	R. P. Ingalls W. C. Mason	9 July 1963	282042	H-415 M \$1.50 P \$13.65
† 34-43	Pattern Recognition and Learning	O. G. Selfridge	20 July 1955		H-21 M \$1.50 P \$7.30
† 34-55	Heuristic Aspects of the Artificial Intelligence Problem	M. L. Minsky	17 Dec. 1956	236885	H-58 M \$1.50 P \$26.80
† 34-57	"MAUDE" (Morse Automatic Decoder)	B. N. Eisenstadt B. Gold D. M. Nelson T. S. Pitcher O. G. Selfridge	30 Apr. 1957	230943	H-4 M \$1.50 P \$13.10
† 34-71	Legendre Sequences	N. Zierler	2 May 1958	268167	H-359 M \$1.50 P \$1.90
† 34-72	Some Results of the "MAUDE" Program	B. Byrnes B. Gold C. Kemball	June 1958	236398	H-39 M \$1.50 P \$9.40
† 34-75	A Preliminary Study of Human Pattern Recognition	U. Neisser	12 Sept. 1958	236395	H-59 M \$1.50 P \$6.40

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No.				DDC No.	Hayden Serial and Prices
† 34-76	A Survey of Soviet Communication Electronics	P. E. Green, Jr., Editor	Sept. 1958		H-8 M \$2.65 P \$59.75
† 34-84	A Summary of Detection Theory Notions in Radar Astronomy Terms	P. E. Green, Jr.	18 Jan. 1960	245698	H-189 M \$1.50 P \$8.80
34-85	A Transistorized Frequency Standard	P. L. Fleck	26 Jan. 1960	251107	H-255 M \$1.50 P \$4.60
34G-0002	Data Recording Equipment for Propagation Experiments	R. E. Gay W. B. Smith C. A. Wagner	12 Apr. 1960	239660	H-124 M \$1.50 P \$9.70
† 34G-0003	Radiometer Techniques in Radar	R. Price	10 June 1960	238759	H-121 M \$1.50 P \$17.20
34G-0005	A Computer Program for Processing Signals Received in Radar Astronomy Experiments	P. L. Fleck T. J. Goblick	14 Oct. 1960	245549	H-200 M \$1.50 P \$7.00
34G-0006	Sequential Transmission of Digital Information with Feedback	M. Horstein	8 Aug. 1960		H-136 M \$1.80 P \$34.00
34G-0008	On the Detection of Stochastic Signals in Additive Normal Noise: Part II	D. Middleton §	28 Dec. 1960	250287	H-247 M \$1.50 P \$16.30
34G-1	A Critique of Wilcox's Method of Ambiguity Function Synthesis	W. S. Widnall	28 Nov. 1961	267537	H-366 M \$1.50 P \$3.15
† 34G-2	The Detection and Identification of Underground Nuclear Explosions: A Study	G. L. Turin	2 Mar. 1962	273825	H-389 M \$1.50 P \$9.40
† 34G-3	The Effect of Approximation Errors in a General Class of Matched Filter Detectors	M. J. Levin	13 Feb. 1962	272757	H-379 M \$1.50 P \$4.40
† 34G-4	Maximum-Likelihood Estimation of the Correlation Function of a Threshold Signal, and Its Application to the Measurement of the Target Scattering Function in Radar Astronomy	R. Price	25 May 1962	276903	H-403 M \$1.50 P \$8.90
† 34G-5	Instantaneous Spectra and Ambiguity Function	M. J. Levin	2 Mar. 1962	273239	H-386 M \$1.50 P \$3.15

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No.				DDC No.	Hayden Serial and Prices
34G-6	Estimation of Doppler Shift and Spectral Width of a Random Process	M. J. Levin	12 June 1962	278686	H-409 M \$1.50 P \$4.40
34G-7	Estimation of the Second-Order Statistics of Randomly Time-Varying Linear Systems	M. J. Levin	2 Nov. 1962	289607	H-445 M \$1.50 P \$11.40
34G-8	The Estimation of a Pulse Transfer Function in the Presence of Noise	M. J. Levin	9 July 1962	282043	H-412 M \$1.50 P \$5.65
34G-9	Confidence Intervals and Sample Sizes in the Measurement of Signal and Noise Powers, Signal-to-Noise Ratios and Probability of Error	J. L. Holsinger	3 Jan. 1963	295133	H-466 M \$1.50 P \$11.40
34G-10	Upper Bound to the Capacity of a Linear Time-Varying Channel with Additive Gaussian Noise	G. D. Forney, Jr.	26 Sept. 1962	287453	H-437 M \$1.50 P \$5.40
34G-12	Radar Observations of the Planet Venus in the Soviet Union in April 1961		27 Feb. 1963	401137	H-489 M \$1.50 P \$15.90
35G-0002	Electron Density Measurements in the Wakes of Hypervelocity Pellets	M. Labitt M. A. Herlin	25 May 1961	272629	H-584 M \$1.50 P \$3.60
35G-2	Kinetic Theory Description of the Initial Expansion of a Gas Cloud	G. Bienkowski §	2 Nov. 1962	290491	H-446 M \$1.50 P \$13.40
36-18	Band-Pass Filters with Linear Phase	R. M. Lerner	July 1957	236399	H-55 M \$1.50 P \$7.30
36-25	A History of the Effort of MIT Lincoln Laboratory in the UHF/SHF Tropospheric-Scatter Communication Field Utilizing Frequency Modulation	W. E. Morrow, Jr. W. T. Burke	1 Jan. 1958	237119	H-102 M \$1.50 P \$12.70
† 36-36	On the Pathological Character of Independent Random Variables	D. G. Brennan	5 May 1959	245237	H-196 M \$1.50 P \$7.60
† 36-41	A Method of Speech Compression	R. M. Lerner	24 Aug. 1959	244920	H-164 M \$3.15 P \$67.00

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No.				DDC No.	Hayden Serial and Prices
36-42	Design of Signals	R. M. Lerner	11 Feb. 1960	236230	H-81 M \$1.50 P \$16.30
36-44	Additional Tests on the AN/FRC-47 (XD-1) Mock-up System	B. E. Nichols	11 Mar. 1960	243578	H-163 M \$1.50 P \$4.00
† 36G-0045	The Capture of the Weaker of Two Co-Channel Frequency-Modulated Signals	J. M. Gutwein	21 May 1960		H-109 M \$2.30 P \$68.20
36G-0047	A Tabulation of Quadratic Residues or Legendre Sequences with Respect to Primes up to 1024	R. M. Lerner A. Sherman	27 July 1960	241464	H-137 M \$1.50 P \$13.30
36G-1	The Influence of Terrain Shielding on Radio Wave Propagation at 8000 Mcps	W. E. Morrow, Jr. D. Karp R. V. Locke, Jr. W. C. Provencher	20 Nov. 1962	290511	H-452 M \$1.50 P \$2.40
36G-2	Microwave Cross Section of Thin Dipoles	C. L. Mack, Jr.	15 Nov. 1962	291231	H-458 M \$1.50 P \$8.40
36G-3	Optimum Satellite Dispensing Velocities for an Equatorial High Altitude Nonsynchronized Satellite Communication System	W. E. Morrow, Jr.	5 Dec. 1962	292995	H-461 M \$1.50 P \$3.90
36G-4	A Real-Time Fourier Transformer	W. E. Morrow, Jr. J. Max J. Petriceks D. Karp	16 July 1963	413786	H-526 M \$1.50 P \$5.60
36G-5	The Selection of Varactor Diodes for a 2X Multiplier	D. E. Crook	18 Mar. 1963	402827	H-507 M \$1.50 P \$10.80
36G-7	Statistics of Visibility in Satellite Communication Systems	C. L. Mack, Jr.	12 Sept. 1963	422340	H-546 M \$1.50 P \$7.00
37G-1	A Theorem on Fourier Integrals and an Application to the Theory of Measurement in Quantum Mechanics	H. E. Moses	5 Feb. 1963	296789	H-479 M \$1.50 P \$2.40
312-12 (Rev. 1)	The Use of Pulse Coding to Discriminate Against Clutter	R. Manasse	7 June 1964	260230	H-320 M \$1.50 P \$4.65

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No.				DDC No.	Hayden Serial and Prices
312-17	Radar Coverage on ICBM Trajectories	P. A. Willmann	7 July 1958	236400	H-54 M \$1.50 P \$4.60
312-23	The Use of Radar Interferometer Measurements to Study Planets	R. Manasse	18 Mar. 1959	236235	H-77 M \$1.50 P \$5.50
† 312-26	Range and Velocity Accuracy from Radar Measurements	R. Manasse	3 Feb. 1955	236236	H-78 M \$1.50 P \$6.40
312G-0001	Radar and Optical Observations on Reentry of the Trailblazer I (D-58) Test Vehicle of June 4, 1959	H. L. Kasnitz	May 1960	249718	H-244 M \$1.50 P \$6.10
312G-0001-1	Radar and Optical Observations on Reentry of the Trailblazer I (D-58) Test Vehicle of March 29, 1960	H. L. Kasnitz	June 1960	255950	H-292 M \$1.50 P \$12.15
312G-0002	An S-Band System for Measurement of Scattering from Hypervelocity Models	H. G. Pascalar D. E. Crook	Oct. 1960	250799	H-249 M \$1.50 P \$11.80
312G-0004	200 MC Beacon Tracking System for Reentry Physics	E. F. Tarbox	14 Sept. 1961	264325	H-347 M \$1.50 P \$6.65
312G-0006	AC and Impulse Switching Techniques for Use with Magnetic Memories	R. E. McMahon	26 June 1961	259503	H-319 M \$1.50 P \$7.65
312G-1	Flashing Light Encoders	L. A. Jacobson	27 Nov. 1961	269588	H-372 M \$1.50 P \$6.15
† 312G-3	On the Turbulent Far-Wake in Incompressible Axi-Symmetric Flow	A. W. K. Metzner	15 Nov. 1961	266943	H-362 M \$1.50 P \$6.40
312G-4	Scattering from a Homogeneous Plasma Cylinder of Infinite Length	C. M. deRidder L. G. Peterson	15 Jan. 1962	274067	H-392 M \$1.50 P \$25.40
312G-5	Three-Degrees-of-Freedom Trajectory Analysis Program	K. Kresa P. A. Willmann	30 Jan. 1962	273134	H-384 M \$1.50 P \$7.90
312G-7	Optical Observations of Lincoln Laboratory Hypersonic Re-entry Vehicles Trailblazers Ic and Id	F. A. Wilson J. R. Bauer	16 May 1962	283416	H-418 M \$1.50 P \$12.15

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No.				DDC No.	Hayden Serial and Prices
312G-8	Scattering from a Radially Varying Plasma Cylinder of Infinite Length	C. M. deRidder L. G. Peterson	4 Dec. 1962	294647	H-464 M \$1.50 P \$22.90
312G-9	Linearized Theory of Homogeneous Turbulence in a Compressible Fluid	A. W. K. Metzner	7 June 1962	278439	H-407 M \$1.50 P \$10.40
312G-10	Sources of Error in Microwave Transmission Measurement of Ionized Trails	C. Bressel G. H. Price	3 July 1962	283563	H-419 M \$1.50 P \$19.90
312G-12	Radar Data Recording System, Arbuckle Neck Site, Wallops Island, Virginia	A. C. Dyer D. Keren R. W. MacComb H. W. Rudolph, Jr.	23 Aug. 1962	401486	H-497 M \$1.50 P \$11.20
312G-13	Programs for Calculating a Predicted Radar Trajectory	K. Kresa M. R. Tausner	8 Aug. 1962	296540	H-478 M \$1.50 P \$10.15
315-3	108 Mcps Tracking Antenna for Millstone Hill Radar	M. E. Devane	1 Dec. 1959	244405	H-177 M \$1.50 P \$4.30
315G-0001	The Study of Waveguide Shorting Plungers	R. N. Assaly	25 Jan. 1961	251041	H-254 M \$1.50 P \$8.20
315G-1	Near-Field Characteristics of Array Antennas	L. J. Ricardi W. C. Danforth, Jr. M. H. Malone	17 Oct. 1961	266428	H-354 M \$1.50 P \$14.90
315G-2	A Mechanically Fixed Radar Antenna with Scanning Capability	L. J. Ricardi R. N. Assaly W. C. Danforth, Jr.	16 Oct. 1961	266048	H-353 M \$1.50 P \$7.15
315G-3	A Mechanical Duplexer for High-Powcred X-Band Radars	B. F. LaPage	8 Dec. 1961	271400	H-377 M \$1.50 P \$11.65
† 315G-4	Millstone Hill Zenith-Pointing Paraboloid	M. E. Devanc	7 Jan. 1963	401907	H-501 M \$1.50 P \$4.40
315G-5	A Discussion of the Use of a System of Passive Satellites in Stationary Orbits for Radio Communication	R. N. Assaly	28 Feb. 1963	402841	H-504 M \$1.50 P \$6.20
† 4G-0002	An Experimental Communica- tion Cneter for Scientific and Technical Information	M. M. Kesslcr	31 Mar. 1960	254656	H-283 M \$1.50 P \$6.70

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No.			DDC No.	Hayden Serial and Prices
† 4G-0007	A Millimeter Wave Anti-Missile Miss Distance Indicator	J. W. Meyer	16 Jan. 1961	H-245 M \$1.50 P \$2.80
4G-0010	System Applications of Millimeter Waves	J. W. Meyer	17 Feb. 1961	H-261 M \$1.50 P \$11.50
41G-0002	Practical Realization of Video and IF Matched Filters	D. R. Bromaghim	14 July 1960	H-144 M \$1.50 P \$4.30
41G-0004	Doppler Analyzer Display	D. R. Bromaghim W. H. Drury W. F. Kelley	7 Mar. 1961	H-274 M \$1.50 P \$10.30
41G-0008	A General Method for Controlling the Time and Frequency Envelopes of FM Signals	E. N. Fowle	5 June 1961	H-309 M \$1.50 P \$4.40
41G-0009	A Method of Signal Design Employing Saddle Point Integration	R. D. Haggarty	19 May 1961	H-312 M \$1.50 P \$5.90
41G-0011	On Entire Functions and a Fourier Integral Problem	J. A. Sheehan	5 July 1961	H-314 M \$1.50 P \$4.90
41G-0012	An RF Multiple Beam Forming Technique	W. P. Delaney	9 Aug. 1961	H-334 M \$1.50 P \$23.15
41G-0014	Some Recent Strip Transmission Line Measurements, Formulae, Techniques and Components for Phased Array Radar	D. H. Temme	19 Sept. 1961	H-346 M \$1.50 P \$8.40
† 41G-1	Operational Characteristics of 16 Electron-Beam Parametric Amplifiers in a 900 Mcps Phased Array	J. H. Teele	6 Aug. 1962	H-444 M \$1.50 P \$27.90
41G-3	Echolocation Systems of the Bat: Progress Report on Experimental Studies Conducted at F. A. Webster's Laboratory (1 Nov. 1961 - 1 Sept. 1962)	N. I. Durlach F. A. Webster §	14 Aug. 1963	H-534 M \$1.50 P \$19.40
41G-5	Asymptotic Behavior of the Spectra of RF Pulses with Linear Frequency Modulation	S. L. Borison D. F. DeLong	9 Oct. 1963	H-545 M \$1.50 P \$6.40

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No.				DDC No.	Hayden Serial and Prices
41G-6	Response Functions of Linear Time-Varying Systems	J. C. Lindenlaub	9 Sept. 1963	422263	H-544 M \$1.50 P \$9.60
42G-0001	Testing of Spun-Cast Parabolic Antennas	V. L. Lynn K. J. Keeping	14 July 1960	240111	H-128 M \$1.50 P \$10.00
42G-1	Commentary on a Paper by Kuklev Concerning the Influence of Noise on a Decoding Unit Using a Pulse Code Group	D. Middleton §	28 Dec. 1961	287162	H-436 M \$1.50 P \$14.40
42G-2	Phase Shifting to Avoid Interference Regions Between Antenna Elements	B. H. Labitt	23 May 1962	277561	H-395 M \$1.50 P \$3.60
43-2	Range Ambiguity Resolution in High-PRF Radars Through the Use of Multiple Values of PRF	R. C. Labonte	24 Feb. 1958	238227	H-114 M \$1.50 P \$10.90
43G-1	A Multicavity Klystron Computer Program Including Potential Depression Correction	S. F. Catalano C. Guay G. L. Guernsey R. L. Pease M. E. Schwarz, Jr.	29 Aug. 1963	420687	H-542 M \$1.50 P \$7.20
45-34	Notes on MTI Simulation Techniques	J. W. McGinn, Jr.	7 Oct. 1958	256978	H-322 M \$1.50 P \$4.40
45-34-1	Notes on MTI Simulation Techniques – Part II	J. W. McGinn, Jr.	29 Mar. 1959	256979	H-323 M \$1.50 P \$5.40
† 45-42	Radar Returns from Birds and Their Elimination from Radar Outputs	R. E. Richardson J. M. Stacey H. M. Kohler F. R. Naka	22 Dec. 1959	241994	H-147 M \$1.50 P \$7.90
† 46-37	Some Properties of Folded Cylinder TR Tubes at Intermediate UHF Powers	R. E. Slattery	30 Dec. 1958	245323	H-199 M \$1.50 P \$14.20
† 46-38	Analysis of Noise in Parametric Amplifiers of the Negative Conductance Type	C. Blake	22 Jan. 1959	245235	H-197 M \$1.50 P \$4.00
*† 46-39	A Frequency Domain Theory of Parametric Amplification	B. J. Leon	6 Apr. 1959	245236	H-198 M \$1.50 P \$25.60

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No.				DDC No.	Hayden Serial and Prices
46-42	Resonant-Cavity Stabilization of Reflex-Klystron Oscillators	W. A. Andrews C. E. Chase H. Feldman	Jan. 1958	236884	H-96 M \$1.50 P \$12.10
† 46-43	Design Considerations for Cassegrainian and Gregorian Reflector Type Microwave System	K. J. Keeping	25 Jan. 1960	244400	H-174 M \$1.50 P \$17.20
46-45	Folded Cylinder TR for $3\frac{1}{8}$ - Inch Line	C. E. Muehe R. J. Carbone	1 Dec. 1959	240455	H-133 M \$1.50 P \$5.20
46-46	Tables of Some Properties of Liquid Helium	J. Fineman C. E. Chase	10 Aug. 1959	244404	H-175 M \$1.50 P \$8.50
46-47	A Simple Clean Pressure Gauge for the Millimeter Range	C. E. Muehe	18 Nov. 1959	244402	H-176 M \$1.50 P \$3.10
† 46-48	The Traveling Wave Resonator and High Power Microwave Testing	S. J. Miller	8 Jan. 1960	243855	H-166 M \$1.50 P \$16.00
46-50	Folded Cylinder UHF Duplexer for $6\frac{1}{8}$ -Inch Coaxial Line	C. E. Muehe	10 Mar. 1960	237003	H-98 M \$1.50 P \$4.00
46G-0001	A Horizontally-Polarized Omnidirectional Linear Array with a Cosecant-Squared Vertical Beam	F. I. Sheftman	31 Mar. 1960	236677	H-91 M \$1.50 P \$10.90
46G-0002	A Broadband Impedance Transition for Coaxial Line	C. B. Nelson	15 Apr. 1960	236273	H-84 M \$1.50 P \$5.50
46G-0003	Some Aspects of High Power Window Design	C. E. Muehe	3 Oct. 1960	244326	H-172 M \$1.50 P \$8.80
46G-0005	Primary Feed for Damp Ship Antenna	K. J. Keeping	15 July 1960	240172	H-131 M \$1.50 P \$15.40
46G-0006	The High Frequency Low Pressure Discharge	H. S. Bennett	24 Aug. 1961	262240	H-339 M \$1.50 P \$9.40
46G-0007	An Additional Consideration in the Design of Traveling Wave Resonators	S. J. Miller	26 Oct. 1960	246186	H-213 M \$1.50 P \$2.50

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No.			DDC No.	Hayden Serial and Prices
46G-0008	A Wide Band Antenna Having Axially Symmetrieal Patterns, High Gain and Low Side Lobes for All Polarizations	K. J. Keeping	30 Nov. 1960	248360 H-227 M \$1.50 P \$10.60
46G-0009	A Simple Approximate Expression for Converting Directly from Noise Figures in DB to Noise Temperatures	E. P. McCurley C. Blake	8 Dec. 1960	248942 H-231 M \$1.50 P \$2.20
46G-0010	A Family of Hybrids in Large Size Coaxial Line	W. A. Both	17 Jan. 1961	251245 H-256 M \$1.50 P \$4.30
46G-0012	Evaluation of Three Microwave Densitometers	S. J. Miller F. I. Sheftman	21 July 1961	260947 H-325 M \$1.50 P \$2.40
46G-0013	Some Equilibrium Properties of Elemental Supereconductors	J. Fineman	31 July 1961	261866 H-329 M \$1.50 P \$14.40
46G-1	Amplitude and Phase Deviation in Waveguides with Shunt Devices	A. H. Kessler	8 June 1962	285628 H-430 M \$1.50 P \$17.15
46G-2	The Surface Resistance of High-Current Mierowave Discharges in Argon	C. E. Muehe T. J. Fessenden	20 Mar. 1963	403653 H-503 M \$1.50 P \$13.40
46G-3	A Simple Method for Designing an Elliptical Polarizer in Square Waveguide	A. H. Kessler W. J. Getsinger	28 May 1963	407624 H-514 M \$1.50 P \$4.80
46G-4	Experimental Evaluation of a 1000-Wavelength Antenna	W. D. Fitzgerald V. L. Lynn K. J. Keeping	13 May 1963	406109 H-512 M \$1.50 P \$8.40
† 47-16	The Theory of the Radiometer	E. J. Kelly D. H. Lyons W. L. Root	2 May 1958	H-304 M \$1.50 P \$9.65
47-19	Computer Simulation of the Pure-Phase Periodogram and the Doppler Phase Difference Integrator	S. F. Catalano E. J. Jones	12 Sept. 1958	261365 H-332 M \$1.50 P \$2.65
† 47-24	A Deeoding Procedure for Polynomial Codes	I. S. Reed G. Solomon	6 Mar. 1959	241701 H-143 M \$1.50 P \$2.50
† 47-25	Note on Mixed Pre- and Post-Deteetion Integration of Doppler Eehocs	D. H. Lyons	12 May 1959	H-184 M \$1.50 P \$4.00

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No.				DDC No.	Hayden Serial and Prices
† 47-26	An IF Power Comparator with Large Dynamic Range	G. R. Curry M. Axelbank	12 May 1959	233571	H-43 M \$1.50 P \$8.80
† 47-28	Three-Phase Codes	D. F. DeLong	24 July 1959	241519	H-142 M \$1.50 P \$6.10
† 47-29	False Alarm Rate for the Doppler Phase Difference Integrator	I. S. Reed E. J. Jones H. M. Jones J. J. Mikulski	9 Oct. 1959	232331	H-42 M \$1.50 P \$7.90
† 47-30	On the Sensitivity of a Simple Continuously Calibrated Radiometer	E. J. Kelly J. W. McGinn	18 Dec. 1959	244836	H-188 M \$1.50 P \$4.30
† 47-32	Computer Applications of Boolean Functions of Time	I. S. Reed R. C. Jeffrey	15 Sept. 1959	244401	H-179 M \$1.50 P \$7.60
47-33	False Alarm Rate of the Doppler Phase Difference Integrator	J. J. Mikulski	30 Sept. 1959	244837	H-187 M \$1.50 P \$4.00
47-34	Some Counting and Inversion Formulas Involving Groups	G. Solomon	1 Dec. 1959	233869	H-52 M \$1.50 P \$5.20
† 47-35	Statistical Error Control of a Realizable Binary Symmetric Channel	I. S. Reed	1 Nov. 1959	241453	H-141 M \$1.50 P \$4.60
† 47-36	Detection of Signals in Non-Gaussian Noise	D. L. Clark	15 Dec. 1959	232332	H-41 M \$1.50 P \$5.50
† 47-37	Linear Recursive Sequences as Finite Difference Equations	G. Solomon	15 Mar. 1960	243047	H-157 M \$1.50 P \$5.20
† 47-38	The Scattering Matrix: Polarization, Power and Periodic Bodies from the Viewpoint of Matrix Theory	J. J. Mikulski	1 Mar. 1960	235249	H-69 M \$1.50 P \$9.40
47G-0001	The Characteristics of a Series of Fixed Coils at VHF	M. Axelbank G. R. McCully G. R. Curry	21 Apr. 1960	237852	H-110 M \$1.50 P \$5.50
47G-0003	A Direct-Coupled Multiplier for Acoustic Sonar	D. A. Cahlander	20 May 1960		H-103 M \$1.50 P \$17.20

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No.				<u>DDC No.</u>	<u>Hayden Serial and Prices</u>
47G-0004	The Characteristics of a Series of Tunable Coils at VHF	M. Axelbank G. R. McCully G. R. Curry	3 June 1960	239661	H-122 M \$1.50 P \$6.10
47G-0006	Experimental Autocorrelation of Binary Codes	D. F. Delong	24 Oct. 1960	245803	H-204 M \$1.50 P \$4.30
47G-0007	Detection of Signals in Non-Gaussian Noise - Computation Results for the Linear and Limiting Detector Systems	J. W. McGinn, Jr.	7 Oct. 1960	246779	H-220 M \$1.50 P \$8.80
47G-0010	An Ultrasonic Receiver for Detecting Signals of Bats	A. Bertolini	1 Dec. 1960	248361	H-228 M \$1.50 P \$12.10
47G-0010	An Ultrasonic Receiver for Detecting Signals of Bats (Rev. 1)	A. Bertolini	5 Dec. 1961	268702	H-371 M \$1.50 P \$9.90
47G-0011	Traveling-Wave Tubes in Radiometers	D. Keren	28 Dec. 1960	249572	H-239 M \$1.50 P \$8.80
† 47G-0012	Idler Circuits in Varactor Frequency Multipliers	B. L. Diamond	13 Dec. 1960		H-236 M \$1.95 P \$36.10
47G-0013	The Radar Measurement of Range, Velocity and Acceleration	E. J. Kelly	6 Jan. 1961	249468	H-243 M \$1.50 P \$11.20
47G-0014	An Amplifier for Driving Electrostatic Transducers	G. R. Curry	11 Apr. 1961	254953	H-284 M \$1.50 P \$2.75
47G-0015	Detection of Signals in Non-Gaussian Noise - Computation Results for the Ratio Detector System	J. W. McGinn, Jr.	3 Apr. 1961	254035	H-277 M \$1.50 P \$8.80
47G-0016	A Non-Gaussian Noise Generator	D. F. Mayer	28 Feb. 1961	252497	H-268 M \$1.50 P \$9.70
47G-0018	An S-Band Sweep-Frequency Receiver	D. Keren	17 Mar. 1961	253619	H-273 M \$1.50 P \$7.00
47G-0019	APC with Pulse Reference	T. J. Rey	9 Nov. 1960	255695	H-290 M \$1.50 P \$29.90

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No.				DDC No.	Hayden Serial and Prices
† 47G-0020	A New Class of Codes	G. Solomon	28 Apr. 1961	255696	H-287 M \$1.50 P \$3.15
47G-0022	Quaternary Cyclic Codes	G. Solomon	13 Sept. 1961	263608	H-341 M \$1.50 P \$4.90
47G-0023	AFC for Discrete Frequencies	T. J. Rey	19 May 1961	259479	H-316 M \$1.50 P \$7.40
47G-0025	The Phase Periodogram Detector	E. J. Kelly	17 May 1961	256710	H-300 M \$1.50 P \$4.40
47G-0026	A Method for Finding Output Probability Densities	R. P. Wishner	20 June 1961	258918	H-311 M \$1.50 P \$4.40
47G-0027	Distribution of the Normalized Periodogram Detector	R. P. Wishner	26 June 1961	259478	H-315 M \$1.50 P \$7.90
47G-1	A Weight Formula for Group Codes	G. Solomon	9 Oct. 1961	264999	H-349 M \$1.50 P \$3.15
† 47G-2	Application of Statistical Estimation Procedures to the Identification Problem	R. P. Wishner J. C. Lindenlaub	3 Nov. 1961	266877	H-358 M \$1.50 P \$6.40
47G-3	The Design of Semiconductor-Diode Detector Circuits	G. R. Curry M. Axelbank	28 Feb. 1962	273510	H-388 M \$2.20 P \$43.65
† 47G-4	The Covariance Functions of Sine and Cosine Processes	J. W. McGinn, Jr.	26 Feb. 1962	273243	H-382 M \$1.50 P \$6.65
47G-5	Some Results for Higher-Order Varactor Frequency Multipliers	B. L. Diamond	21 Mar. 1963	404819	H-508 M \$2.05 P \$27.80
† 47G-6	Determination of Weight-to-Drag Ratio from Ratio Measurements	S. F. Catalano H. Schneider	8 Mar. 1963	401488	H-492 M \$1.50 P \$5.65
47G-7	Random Noise in Amplitude Comparison Monopulse Systems	J. W. McGinn, Jr.	7 Feb. 1963	400113	H-487 M \$1.50 P \$7.40
† 48-6	A Microwave Single Sideband Modulator	H. G. Pascalar	22 Apr. 1958	236271	H-68 M \$1.50 P \$8.80

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No.			DDC No.	Hayden Serial and Prices
† 48-7	An Investigation of Frequency Stabilization Techniques for Backward Wave Oscillators	H. G. Pascalar	3 Aug. 1959	235356 H-71 M \$1.50 P \$12.40
48-8	Measurements on Type HA-34 Traveling Wave Tube Frequency Multiplier	D. E. Crook H. G. Pascalar	19 Aug. 1959	236252 H-74 M \$1.50 P \$2.80
† 48-9	Broadbanding of a Klystron Output Cavity	A. Saharian	4 Jan. 1960	244917 H-186 M \$2.65 P \$53.20
48G-1	Measurement of Field Strength on Resonator Boundaries by the Perturbation of Radiation Field	I. Hefni	8 Feb. 1962	274066 H-394 M \$1.50 P \$8.65
5G-0001	A Heuristic Program that Solves Symbolic Integration Problems in Freshman Calculus, Symbolic Automatic Integrator (SAINT)	J. R. Slagle	10 May 1964	H-295 M \$1.50 P \$27.90
† 50-1	A Computer Memory Using Magnetic Films	J. I. Raffel D. O. Smith	3 June 1959	230471 H-32 M \$1.50 P \$11.20
51-2	Techniques for Measuring the Angular Dispersion of the Easy Axis of Magnetic Films	T. S. Crowther	30 Mar. 1960	255697 H-289 M \$1.50 P \$4.15
51-8	The Lincoln Writer	J. T. Gilmore, Jr. R. E. Savell	6 Oct. 1959	235247 H-61 M \$1.50 P \$8.80
51-10	An Audio-Frequency Hysteresograph for Thin Magnetic Films	D. D. Strassberg	16 Oct. 1959	252046 H-264 M \$1.50 P \$5.50
51-11	Techniques for Pulse Testing Magnetic Film Memory Elements	A. H. Anderson T. S. Crowther	29 Jan. 1960	255698 H-288 M \$1.50 P \$7.40
† 51G-0012	A Functional Description of the L-1 Computer	W. A. Clark, Jr.	28 Mar. 1960	236678 H-92 M \$1.50 P \$3.40
51G-0016	The TX-2 Electrostatic Display System	R. E. Savell	22 Aug. 1960	244325 H-173 M \$1.50 P \$7.60
51G-0017	Graphical Manipulation Techniques Using the Lincoln TX-2 Computer	H. H. Loomis	10 Nov. 1960	247861 H-226 M \$1.50 P \$9.10

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No.				DDC No.	Hayden Serial and Prices
51G-0018	A Program for Testing Sequences of Random Numbers	L. Kleinrock	25 Oct. 1960	246044	H-209 M \$1.50 P \$8.80
51G-0021	PCM Television Bandwidth Reduction Using Pseudo-Random Noise	L. G. Roberts	30 Dec. 1960		H-233 M \$1.50 P \$13.00
51G-1	Improved TX-2 Gated Pulse Amplifier	J. H. Reaves	13 Feb. 1963	401489	H-495 M \$1.50 P \$15.40
51G-2	Automatic Memory Array Production System	C. G. Ryan	28 Feb. 1962	273238	H-385 M \$1.50 P \$7.15
51G-3	Deposited Connections and Wiring	E. A. Guditz	7 Sept. 1962	286545	H-431 M \$1.50 P \$14.40
51G-5	Storage-Time Delay Calculation for a Transistor Pulse Amplifier	J. H. Reaves	13 Feb. 1963	298065	H-483 M \$1.50 P \$9.40
51G-6	Preparation of Actual-Size Printed Wiring Layouts	E. A. Guditz	4 Dec. 1963	291893	H-460 M \$1.50 P \$4.40
51G-8	Programming Specifications for the FX-1 Computer	S. M. Ornstein J. E. Laynor	13 Mar. 1963	404508	H-505 M \$1.50 P \$10.20
† 52-4	New Averaging Program for the Millstone Hill Radar Site	F. Nagy	1 Apr. 1959	246776	H-219 M \$1.50 P \$3.10
52-7	Di-Pulse Logic	K. E. Perry	25 June 1959	255344	H-293 M \$1.50 P \$2.90
† 52G-0011	Some Remarks on Cyclic and Pseudo-Cyclic Codes	S. S. Shatz	9 Aug. 1960	241518	H-140 M \$1.50 P \$3.10
52G-0013	Galois Cohomology of Certain Modules Over Formal Power Series Fields	S. S. Shatz	8 Sept. 1960	243180	H-161 M \$1.50 P \$10.60
52G-0014	Inertial Selection for Magnetic Core Logic	R. H. Tancrell	11 Oct. 1960	244919	H-191 M \$1.50 P \$9.10
52G-0017	MIT Solar Plasma Experiment Instrumentation	E. F. Lyon	14 Apr. 1961	254954	H-285 M \$1.50 P \$10.50

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No.				DDC No.	Hayden Serial and Prices
52G-0018	A Tunnel Diode Reflex Memory	K. E. Perry	17 Apr. 1961	254955	H-286 M \$1.50 P \$3.00
52G-0019	Interference Suppression Performance of Several FM Receivers Using Feedforward	B. H. Hutchinson	26 July 1961		H-351 M \$1.50 P \$38.40
52G-0020	A Cohomological Lemma and Its Application	S. S. Shatz	13 June 1961	258056	H-310 M \$1.50 P \$3.65
+ 52G-1	A Solid State Buffer-Memory System to Handle Randomly Transmitted Information	R. M. Horowitz	13 Feb. 1962	273785	H-390 M \$1.50 P \$6.40
52G-2	Statistical Properties of the Dicon Receiver	J. A. Dumanian	2 Mar. 1962	275278	H-401 M \$1.50 P \$8.65
52G-3	Instructions for the Use of Mutual Moon Visibility Charts	F. Nagy	7 June 1962	276879	H-405 M \$1.50 P \$2.90
52G-4-I	Foundations of a Theory of Algebraic Codes. Part I: Local Theory	S. S. Shatz	20 Sept. 1962	286548	H-432 M \$1.50 P \$5.90
52G-4-II	Foundations of a Theory of Algebraic Codes. Part II: Global Theory	S. S. Shatz	20 Sept. 1962	286546	H-433 M \$1.50 P \$6.40
52G-5	The Descendent Theorem in Abelian Groups	S. S. Shatz	16 Nov. 1962	290801	H-456 M \$1.50 P \$2.90
52G-6	Assembly of Precision Ferrite Pot Core Inductors	R. S. Berg B. Howland	17 Dec. 1962	294646	H-463 M \$1.50 P \$3.40
53G-0039	Considerations in the Design of a Random-Access Cryosar Memory	R. C. Johnston	5 July 1960	240224	H-129 M \$1.50 P \$9.70
53G-0044	Cryosar Memory Design	R. C. Johnston	19 May 1961	257183	H-302 M \$1.50 P \$8.15
53G-0051	Device Requirements for a Large Cryosar Memory	R. C. Johnston	27 Dec. 1960	249057	H-234 M \$1.50 P \$2.80
53G-0052	A Magneto-Optic Apparatus for the Dynamic Study of Ferromagnetic Surface Domains	F. W. Sarles, Jr.	23 Dec. 1960		H-242 M \$3.00 P \$63.70

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No.				DDC No.	Hayden Serial and Prices
† 53G-0059	Proposal for Magnetic Domain-Wall Storage and Logic	D. O. Smith	31 May 1961	257771	H-307 M \$1.50 P \$4.65
53G-0063	Surface Anisotropy Energy Density of a Ferromagnet	R. F. Soohoo	18 Aug. 1961	261588	H-333 M \$1.50 P \$2.90
53G-0064	A Microwave Magnetic Microscope	R. F. Soohoo	23 Aug. 1961	262542	H-324 M \$1.50 P \$2.90
53G-0065	Ferromagnetic Resonance in Yttrium Iron Garnet Film	R. F. Soohoo	28 Aug. 1961	262945	H-338 M \$1.50 P \$1.65
† 54-4	Physical Machines and Their Abstract Counterparts	M. Minsky	23 Mar. 1959		H-272 M \$1.50 P \$37.90
† 54-5	Theory of Formal Systems	R. M. Smullyan	15 Apr. 1959		H-60 M \$2.40 P \$70.60
† 54-9	Hierarchies in Pattern Recognition	U. Neisser	9 Oct. 1959		H-421 M \$1.50 P \$4.90
54-10	Human Recognition of Hand-Printed Characters	U. Neisser P. Weene	13 Oct. 1959		H-424 M \$1.50 P \$2.40
† 54-19	A Theory of Cognitive Processes	U. Neisser	23 Feb. 1960	243178	H-160 M \$1.50 P \$7.30
† 54G-0020	Topics in Dynamic Programming. II: Truncated Policies	M. L. Freimer	18 Apr. 1960		H-82 M \$1.60 P \$39.10
54G-0021	Linear Statistical Classification	A. Laemmle	16 May 1960	237125	H-101 M \$1.50 P \$3.40
54G-0022	Machine Correction of Garbled English Text	M. B. Evans C. K. McElwain F. VanHoosen §	1 June 1960	237700	H-107 M \$1.50 P \$7.30
54G-0025	The Independence of Attributes in Memory	U. Neisser A. Warmoth §	28 June 1960	239344	H-118 M \$1.50 P \$3.10
54G-0027	A 6-Symbol 7-State Universal Turing Machine	M. L. Minsky	19 Aug. 1960	242594	H-151 M \$1.50 P \$3.10

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No.				DDC No.	Hayden Serial and Prices
54G-0028	Machine Processing of Line Drawings	L. Hodes	7 Mar. 1961	252850	H-271 M \$1.50 P \$5.20
54G-0029	A 6-Symbol 6-State Universal Turing Machine	M. Minsky	12 Apr. 1961	259727	H-318 M \$1.50 P \$4.40
55-22	Some Connections Between Linear Recursive Sequences and Error-Correcting Codes: Informal Lectures	E. Weiss	22 Jan. 1960	239172	H-123 M \$1.50 P \$38.80
55G-0024	Residue Class Rings and Linear Recursive Sequences	E. Weiss	4 May 1960	236397	H-86 M \$1.50 P \$3.10
55G-0027	Coset Leaders	E. C. Dade	24 Aug. 1960	242595	H-152 M \$1.50 P \$3.70
55G-0028	Compression and Coding	E. Weiss	11 Oct. 1960	244918	H-190 M \$1.50 P \$1.60
55G-0030	The Shortest Path Through Many Points of a Set of Dimension α	J. R. Kinney	1 Dec. 1960	247667	H-224 M \$1.50 P \$2.80
55G-0031	A Limit Theorem for a Position Dependent Branching Process	H. E. Conner	23 Mar. 1961		H-275 M \$1.50 P \$13.00
55G-0033	Mathematical Foundations of Scattering Theory	R. T. Prosser	5 Apr. 1961	254142	H-281 M \$1.50 P \$6.40
55G-0035	Generalized Reed-Muller Codes	E. Weiss	11 May 1961	256547	H-299 M \$1.50 P \$3.90
55G-0037	Tangential Limits of Functions from the Class S_α	J. R. Kinney	9 May 1961	256370	H-298 M \$1.50 P \$1.65
† 55G-1	A Survey of Functional Integration with Applications of the Wiener Integral	T. I. Seidman	16 Oct. 1961	265200	H-350 M \$1.50 P \$15.15
55G-2	An Acquirable Code	E. Weiss D. Gorenstein §	9 July 1962	281751	H-411 M \$1.50 P \$2.90

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No.				DDC No.	Hayden Serial and Prices
55G-3	Computing Good Coefficients for a Linear Evaluation Function	J. R. Slagle	11 Mar. 1963	401774	H-496 M \$1.50 P \$3.60
†58-2	Remembering the Present States of a Number of Variables	D. B. Yntema G. E. Mueser	16 Mar. 1959	243179	H-162 M \$1.50 P \$4.90
58-6	The Reliability of Empirical Waiting-Time Distributions	J. E. K. Smith L. Klem	19 Aug. 1959	234563	H-57 M \$1.50 P \$5.20
58G-0011	An Introduction to Digital Computing	B. F. Green, Jr.	18 Aug. 1960	242597	H-153 M \$1.50 P \$14.50
58G-0013	Remembering the Present States of a Number of Variables. III: Why It Is Difficult to Keep Track of Several Variables with the Same Set of States	D. B. Yntema G. E. Mueser	17 Aug. 1960	242283	H-148 M \$1.50 P \$4.60
58G-0018	Visual Acuity Under Blue Illumination	R. T. Mitchell R. R. Mitchell	10 Feb. 1961	251570	H-260 M \$1.50 P \$4.60
58G-0024	Information Processing Language V (IPL-V) Special Procedures for the Lincoln 709/7090 Version	B. F. Green, Jr. A. Wolf	14 Aug. 1961	261867	H-330 M \$1.50 P \$11.40
61G-1	Design Curves for a Circular Polarizer	W. C. Danforth, Jr. L. J. Ricardi	19 Aug. 1963	417184	H-536 M \$1.50 P \$2.40
61G-2	A Reflection-Type Polarizer for the West Ford Antennas	B. F. LaPage	30 Dec. 1963	440430	H-565 M \$1.50 P \$7.60
61G-3	The Aperture Efficiency of Some Horn-Fed Paraboloidal Reflectors	A. R. Dion	30 Dec. 1963	431779	H-566 M \$1.50 P \$4.60
62G-1	Vocoded Speech	B. Gold	7 May 1963	407512	H-515 M \$1.50 P \$5.60
62G-2	Characteristics and Applications of Solid-State Operational Amplifiers	J. N. Harris K. E. Perry	23 July 1963	413473	H-528 M \$1.50 P \$14.20
62G-3	Pointing the Lincoln Laboratory Building B Roof Antenna in Real Time Using the CDC 160-A Computer	J. D. Drinan	26 June 1962	410546	H-524 M \$1.50 P \$9.80

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No.				DDC No.	Hayden Serial and Prices
62G-4	A Qualitative Description of Sequential Decoding	I. L. Lebow	12 July 1963	413949	H-529 M \$1.50 P \$6.20
62G-5	An Investigation of the Fano Sequential Decoding Algorithm by Computer Simulation	G. Blustein K. L. Jordan, Jr.	12 July 1963	412632	H-525 M \$1.50 P \$4.80
62G-6	Strategy for a Two-Way Feedback Communication System	F. G. Popp	5 Dec. 1963	426203	H-552 M \$1.50 P \$9.40
62G-8	The Volume Common to Two Intersecting Radar Beams	W. R. Crowther	31 Oct. 1963	425547	H-551 M \$1.50 P \$3.00
64G-1	Performance of Coherent Detection Systems Using Decision Directed Channel Measurement	J. G. Proakis P. R. Drouilhet	27 June 1963	409819	H-521 M \$1.50 P \$5.40
64G-3	Optimum Pulse Transmissions for Multipath Channels	J. G. Proakis	16 Aug. 1963	416639	H-532 M \$1.50 P \$8.20
64G-4	Computer Programs for Processing Signals Received in Radar Astronomy Experiments	P. L. Fleck, Jr. T. J. Goblick, Jr.	16 Aug. 1963	419091	H-540 M \$1.50 P \$5.80
64G-5	The Doubly Non-Central F-Distribution Expressed in Finite Terms	R. Price	13 Sept. 1963	420434	H-543 M \$1.50 P \$10.60
64G-6	Further Considerations in the Use of Large Seismometer Arrays	N. M. Abramson §	14 Nov. 1963	424594	H-550 M \$1.50 P \$3.20
65G-1	A Note on Power Requirements for Digitalized Voice Transmission	B. Reiffen	6 May 1963	405622	H-513 M \$1.50 P \$3.20
65G-2	Optimum Jamming of Incoherently Received FSK Signals	L. I. Bluestein	26 June 1963	413482	H-537 M \$1.50 P \$5.80
65G-3	An Efficient Demodulator for an Analog Pseudo-Noise Multiplex System	H. L. VanTrees	2 July 1963	410795	H-523 M \$1.50 P \$5.80
65G-4	A New Method for Delay-Modulating a Pulse Train	L. I. Bluestein	28 May 1963	406108	H-511 M \$1.50 P \$3.80

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No.				DDC No.	Hayden Serial and Prices
65G-5	An Introduction to Feedback Demodulation	H. L. VanTrees	16 Aug. 1963	416586	H-531 M \$1.50 P \$12.20
65G-6	A Note on Sequential Decoding Applied to Large Alphabet Incoherent Channels - R_{comp} Determination	M. H. Check B. Reiffen	31 May 1963	410883	H-519 M \$1.50 P \$2.80
65G-7	Delay in Data Transmission Through General Networks	B. J. Moriarty	18 Dec. 1963	427258	H-553 M \$1.50 P \$12.20
65G-8	Average Scattering Cross Section of Randomly-Oriented Dipoles	M. H. Check B. Reiffen	30 Dec. 1963	427756	H-555 M \$1.50 P \$4.00
66G-1	Cyclotomic Fields and Their Real Subfields	E. Weiss	9 Aug. 1963	416409	H-530 M \$1.50 P \$2.20
† 71G-1-I	Distortions and Stresses of Paraboloidal Surface Structures	J. W. Mar § F. Y. M. Wan	9 Jan. 1962	296298	H-476 M \$1.50 P \$24.40
† 71G-1-II	Distortions and Stresses of Paraboloidal Surface Structures. Part II. The Membrane Behavior	J. W. Mar § F. Y. M. Wan	4 Jan. 1963	296491	H-477 M \$1.80 P \$41.90
71G-1-III	Distortions and Stresses of Paraboloidal Surface Structures. Part III.	J. W. Mar § F. Y. M. Wan	15 Aug. 1963	417081	H-535 M \$1.70 P \$20.00
*† 71G-2	A Theoretical Analysis and Experimental Study of the Behavior of Panels of Isotropic and Orthotropic Material Under Static and Dynamic Loads	H. A. Balmer § E. A. Witmer § W. A. Loden §	Feb. 1962	273137	H-383 M \$2.05 P \$33.65
71G-3	Dynamic Buckling of Space Frame Radome Models	R. A. Muldoon	15 Feb. 1962	273237	H-387 M \$1.50 P \$18.90
71G-4	Preliminary Investigations on the Mechanical Design of Hardened Foam Radomes	R. A. Muldoon	3 May 1963	275713	H-402 M \$1.50 P \$10.65
71G-5	Air Loads and Pressure Distribution on a Parabolic Antenna Model	J. Bicknell § R. Yeghiayan §	30 Oct. 1962	290512	H-451 M \$1.50 P \$23.15

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No.				DDC No.	Hayden Serial and Prices
† 75-4	Experimental Investigation of Wind-Induced Vibrations in Antenna Members	W. Weaver, Jr.	26 Aug. 1959	231946	H-40 M \$1.70 P \$30.40
75G-0005	Antenna Range Area Construction, Antenna Test Facility, Bedford, Massachusetts	T. J. Lambie	19 Mar. 1960	237349	H-105 M \$1.50 P \$16.30
76-5	Maximum Temperatures in 55-Ft. Rigid Radomes for Temperate and Extreme Desert Environments	S. L. Hensel, Jr.	Nov. 1958		H-498 M \$1.50 P \$18.20
76G-0002	Some Considerations on Shell Theory	K. Washizu §	Oct. 1960	252204	H-265 M \$1.95 P \$53.20
† 76G-0003	The Electrical Evaluation of 110 Foot Diameter Metal Space-Frame Model Radomes and the CW-413 Radome	A. Cohen A. W. Maltese	25 Apr. 1961	256858	H-294 M \$1.50 P \$10.15
8G-0012	Semi-Metals - A New Horizon	B. Lax	24 Apr. 1961	256267	H-296 M \$1.50 P \$9.65
† 81G-0022	Ground State Properties of Nuclear Matter	R. D. Puff	22 July 1960	241463	H-138 M \$1.50 P \$18.70
81G-0026	Symmetry Property of Configurational Entropy	W. H. Kleiner	11 Jan. 1961	249989	H-246 M \$1.50 P \$10.60
81G-0028	The Generation of Microwave Phonons and Their Use in Studying the Spin Phonon Interaction	P. H. Carr	7 Mar. 1961		H-266 M \$1.50 P \$30.00
81G-0030	Symmetry of Configurational Entropy in Lattice Statistics	W. H. Kleiner	22 Mar. 1961	263341	H-340 M \$1.50 P \$8.65
81G-0031	Simple Theory of Tunneling and Its Dependence on a Magnetic Field	P. N. Argyres B. Lax	24 May 1961	257184	H-303 M \$1.50 P \$9.65
81G-1	Broadening in the Master Equation	P. L. Kelley	25 Oct. 1961	266360	H-352 M \$1.50 P \$6.40
† 82-8	Circulators at 70 and 140 kMcps	J. B. Thaxter G. S. Heller	10 July 1959	227946	H-23 M \$1.50 P \$3.40

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No.			DDC No.	Hayden Serial and Prices
† 82-9	Millimeter Instrumentation for Solid State Research	G. S. Heller	20 July 1959	230102 H-29 M \$1.50 P \$8.40
† 82G-0017	Areas for Research and Applications in the Millimeter Range of the Electromagnetic Spectrum	G. S. Heller P. E. Tannenwald	6 May 1960	237002 H-97 M \$1.50 P \$10.90
82G-0021	Atmospheric Absorption of 10-400 kMcps Radiation: Summary and Bibliography to 1960	E. S. Rosenblum	15 Aug. 1960	242598 H-150 M \$1.50 P \$7.90
82G-0029	Determination of Magneto-elastic Coupling by Spin Wave Resonance	M. H. Seavey, Jr.	31 July 1961	261601 H-328 M \$1.50 P \$6.40
82G-1	100 Kcps Modulation Paramagnetic Resonance Spectrometers for Centimeter and Millimeter Wavelengths	W. H. From E. D. Mills	26 Apr. 1962	282039 H-410 M \$1.50 P \$9.90
83G-0031	Concerning the Identity of the Predominant Acceptors in GaSb	A. J. Strauss E. B. Owens	24 Apr. 1961	256889 H-301 M \$1.50 P \$2.15
84-4	Tabulated Energy Values of Optical Transitions Observed in Experiments on the Zeeman Effect of Impurity Levels in Silicon	S. Zwerdling K. J. Button B. Lax	11 Feb. 1960	233266 H-24 M \$1.50 P \$6.10
85G-0004	An Infrared Image Tube for the Spectral Region of 1 to 40 Microns	R. J. Keyes	5 July 1960	258795 H-313 M \$1.50 P \$2.40
† 85G-0008	Photo and Thermal Effects in Compensated Zinc Doped Germanium	R. J. Keyes	21 Oct. 1960	245671 H-203 M \$1.50 P \$5.20
85G-0011	Free Carrier Faraday and Voight Effects for a Cubic Crystal with a Pb-Te Like Band Structure	J. Halpern	25 Aug. 1961	262923 H-337 M \$1.50 P \$9.40

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No.				DDC No.	Hayden Serial and Prices
1964-1	An Approximate Method for the Calculation of Scalar Scattering by Two-Dimensional Bodies	A. D. MacGillivray A. F. Smith	9 Jan. 1964	431781	H-564 M \$1.50 P \$3.40
1964-2	The Angular Resolution of Multiple Targets	J. R. Sklar F. C. Schweppe	14 Jan. 1964	430185	H-560 M \$1.50 P \$18.80
1964-3	Backscatter Radar from Some Low Cross-Section Shapes	A. F. Smith	16 Jan. 1964	431780	H-567 M \$1.50 P \$7.80
1964-4	Optimization of Signals	F. C. Schweppe	16 Jan. 1964	430345	H-557 M \$1.50 P \$10.20
1964-9	Diplexer Using Side-Wall Couplers in One-Half Height Large X-Guide	J. A. Kostriza	17 Jan. 1964	429200	H-557 M \$1.50 P \$3.60
1964-10	A High-Performance He ³ Refrigerator	C. J. Rauch	29 Jan. 1964	433544	H-570 M \$1.50 P \$6.60
1964-11	Error Analysis of a Digital Monopulse Radar	M. Schneider N. T. Gaarder	30 Jan. 1964	430297	H-561 M \$1.50 P \$3.60
1964-12	Fuel-Optimal Singular Control of a Nonlinear Second Order System	M. Athans M. D. Canon	30 Jan. 1964	430272	H-559 M \$1.50 P \$10.80
1964-14	Electromagnetic Back-scattering Cross Section of a Circular Cylindrical Section	S. L. Borison	18 Feb. 1964	433714	H-568 M \$1.50 P \$7.80
1964-15	The Representation of Seismic Waves in Frequency-Wave Number Space	E. J. Kelly	6 Mar. 1964	433611	H-569 M \$1.50 P \$9.20

JOURNAL ARTICLES

JA No.

1	Change of Electron Temperature in an Electron Beam	H. M. Mott-Smith	J. Appl. Phys. <u>24</u> , 249 (1953)
2	The Solution of the Boltzmann Equation for a Shock Wave	H. M. Mott-Smith	Phys. Rev. <u>82</u> , 885 (1951)
3	A Model of the Auditory Threshold and Its Application to the Problem of the Multiple Observer	M. H. Smith, Jr. E. A. Wilson	Psychol. Monographs <u>67</u> , 9 (1953)
6	Mixing of States and Antiferromagnetism	H. P. Hanson	Phys. Rev. <u>89</u> , 1154 (1953)
7	The Phase-Bistable Transistor Circuit	R. H. Baker I. L. Lebow R. H. Rediker I. S. Reed	Proc. IRE <u>41</u> , 1119 (1953)
9	Relativistic Dynamics of a Charged Particle in Crossed Magnetic and Electric Fields with Application to the Planar Magnetron	L. Gold	J. Appl. Phys. <u>25</u> , 683 (1954)
10	Method of Time-Free Solutions for Radioactive Decay and Radionuclide Production	L. Gold	J. Appl. Phys. <u>24</u> , 88 (1953)
11	Wide-Band Data Transmitter	D. J. Gray V. P. Gurske W. E. Morrow, Jr.	Electronics <u>26</u> , No. 9, 168 (1953)
13	On the Diffusion of Decaying Particles in a Radial Electric Field	J. Keilson	J. Appl. Phys. <u>24</u> , 1397 (1953)
14	The Transient Response of Transistor Switching Circuits	I. L. Lebow R. H. Baker	Proc. IRE <u>42</u> , 938 (1954)
15	On the Nature of the Transcendental Curves Associated with the Relativistic Trajectories of Charged Particles	L. Gold	J. Appl. Phys. <u>25</u> , 691 (1954)
16	Potential Distribution and Prevention of a Space-Charge-Induced Minimum . . .	G. C. Sponsler	J. Appl. Phys. <u>25</u> , 282 (1954)
18	Orbital Effect in Neutron-Electron Magnetic Scattering	W. H. Kleiner	Phys. Rev. <u>90</u> , 168 (1953)

Journal Articles

JA No.

21	A Two-Electron Example of Ferromagnetism	J. C. Slater H. Statz G. F. Koster	Phys. Rev. <u>91</u> , 1323 (1953)
22	Exact Interpolation of Band-Limited Functions	A. Kohlenberg	J. Appl. Phys. <u>24</u> , 1432 (1953)
23	Direct Viewing of an Ultrasonic Beam in a Transparent Solid	F. L. McNamara T. F. Rogers	J. Acoust. Soc. Am. <u>25</u> , 338 (1953)
32	Magnetic and Dielectric Amplifiers	D. A. Buck	See III-C-3, <u>Dielectric Materials and Applications</u> . A. R. von Hippel, Ed. (Wiley/Technology Press, New York, 1954)
33	Eigenfunctions of S^2 by a Spin-Operator Method	G. W. Pratt, Jr.	Phys. Rev. <u>92</u> , 278 (1953)
35	The Refractive Index of Germane	M. Green P. H. Robinson	J. Phys. Chem. <u>57</u> , 938 (1953)
36	A More Exact Treatment of the Equations Describing Dielectric Relaxation and Carrier Motion in Semiconductors	J. Keilson	J. Appl. Phys. <u>24</u> , 1198 (1953)
37	On Diffusion in an External Field and the Adjoint Source Problem	J. Keilson	Quart. Appl. Math. <u>12</u> , 435 (1955)
42	A Suggested Modification of Noise Theory	J. Keilson	Quart. Appl. Math. <u>12</u> , 71 (1954)
43	An Historical Note on the Autocorrelation Function	P. E. Green, Jr.	Proc. IRE (Correspondence) <u>41</u> , 1519 (1953)
46	Fused-Quartz Ultrasonic Delay-Line Memory	D. A. Spaeth T. F. Rogers S. J. Johnson §	Electronics <u>16</u> , No. 12, 151 (1953)
47	Rapid Interferometric Analysis of Germane-Hydrogen Mixtures	M. Green P. H. Robinson	Anal. Chem. <u>25</u> , 1913 (1953)
48	Measurement of Permeability Tensor in Ferrites	J. O. Artman P. E. Tannenwald	Phys. Rev. <u>91</u> , 1014 (1953)
49	Transistor Shift Registers	R. H. Baker I. L. Lebow R. E. McMahon	Proc. IRE <u>42</u> , 1152 (1954)
53	Staircase Generator Counts Pulses	N. O. Sokal I. L. Resnick	Electronics <u>27</u> , No. 3, 187 (1954)
54	A Possible Mechanism for 1/f Noise Generation in Semiconductor Filaments	L. Bess	Phys. Rev. <u>91</u> , 1569 (1953)

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58	Thyatron-Vacuum Tube Counter	R. W. Hofheimer	Electronics <u>26</u> , No. 11, 198 (1953)
61	Switching Time in Junction Diodes and Junction Transistors	R. H. Kingston	Proc. IRE <u>42</u> , 829 (1954)
64	Lower Modes of a Concentric Line Having a Helical Inner Conductor	L. Stark	J. Appl. Phys. <u>25</u> , 1155 (1954)
66	Information Loss Attending the Decision Operation in Detection	D. Middleton	J. Appl. Phys. <u>25</u> , 127 (1954)
67	Pedestal-Removing Slicer Circuit	N. O. Sokal G. M. Nonnemaker	Electronics <u>27</u> , No. 3, 220 (1954)
68	PPI Light-Spot-Brightness Probability Distributions	G. C. Sponsler F. L. Shader	J. Appl. Phys. <u>25</u> , 1271 (1954)
72	An Analysis of the Detection of Repeated Signals in Noise by Binary Integration	J. V. Harrington	Trans. IRE <u>IT-1</u> , 1 (1955)
86	Coding for Constant-Data-Rate Systems. Part I - A New Error-Correcting Code	R. A. Silverman M. Balser	Proc. IRE <u>42</u> , 1428 (1954)
87	Water Vapor and the "Channel" Effect in n-p-n Junction Transistors	R. H. Kingston	Phys. Rev. <u>93</u> , 346 (1954)
91	Transient Response of a p-n Junction	B. Lax S. F. Neustadter	J. Appl. Phys. <u>25</u> , 1148 (1954)
92	Ferrite Phase Shifters in Rectangular Waveguide	B. Lax K. J. Button L. M. Roth	J. Appl. Phys. <u>25</u> , 1413 (1954)
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96	A Theory of Domain Creation and Coercive Force in Poly-crystalline Ferromagnetics	J. B. Goodenough	Phys. Rev. <u>95</u> , 917 (1954)
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100	Magnetic Materials for Digital-Computer Components. I. A Theory of Flux Reversal in Polyerystalline Ferromagnetics	N. Menyuk J. B. Goodenough	J. Appl. Phys. <u>26</u> , 8 (1955)
104	The Scattering of Electromagnetic Waves by Turbulent Atmospheric Fluctuations	F. M. H. Villars V. F. Weisskopf	Phys. Rev. <u>94</u> , 232 (1954)

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148	Directional Properties of the Cyclotron Resonance in Germanium	B. Lax H. J. Zeiger R. N. Dexter E. S. Rosenblum	Phys. Rev. <u>93</u> , 1418 (1954)
149	The Interaction of Impurity Atoms with Dislocations in Germanium	A. D. Kurtz S. A. Kulin	Acta Met. <u>2</u> , 352 (1954)
120	Effect of Dislocations on Minority Carrier Lifetime in Germanium	S. A. Kulin A. D. Kurtz	Acta Met. <u>2</u> , 354 (1954)
121 R	Two Formulae Involving Generalized Legendre Functions of Integral and Nonintegral Index	G. C. Sponsler	J. Math. and Phys. <u>34</u> , 50 (1955)
122	Discrimination Transfer along a Pitch Continuum	R. A. Baker S. W. Osgood	J. Exptl. Psychol. <u>48</u> , 241 (1954)
124	Simplified LCAO Method for the Periodic Potential Problem	J. C. Slater G. F. Koster	Phys. Rev. <u>94</u> , 1498 (1954)
127	Theory of Radio Transmission by Tropospheric Scattering Using Very Narrow Beams	H. G. Booker § J. T. deBettencourt	Proc. IRE <u>43</u> , 281 (1955)
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137	Measurement of Carrier Lifetimes in Germanium and Silicon	D. T. Stevenson R. J. Keyes	J. Appl. Phys. <u>26</u> , 190 (1955)
141	Folded Unipole Antennas	J. Leonhard R. D. Mattuck A. J. Poté	Trans. IRE, PGAP <u>AP-3</u> , 444 (1955)
145	A Radio-Frequency Nondestructive Readout for Magnetic-Core Memories	B. Widrow	Trans. IRE, PGEC <u>EC-3</u> , 42 (1954)
146	New Ferrite-Core Memory Uses Pulse Transformers	W. N. Papian	Electronics <u>28</u> , No. 3, 194 (1955)
148	Wave Functions for Impurity Levels	G. F. Koster J. C. Slater	Phys. Rev. <u>95</u> , 1167 (1954);
150	Anisotropy of Cyclotron Resonance in Germanium	B. Lax H. J. Zeiger R. N. Dexter	Physica <u>20</u> , 848 (1954).

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156	Coding for Constant-Data-Rate Systems: Part II - Multiple-Error-Correcting Codes	M. Balser R. A. Silverman	Proc. IRE <u>43</u> , 728 (1955)
158	A Method of Scalogram Analysis Using Summary Statistics	B. F. Green, Jr.	Psychometrika <u>21</u> , 79 (1956)
159	Theory of Scattering in Solids	G. F. Koster	Phys. Rev. <u>95</u> , 1436 (1954)
160	Magnetic Scattering of Slow Neutrons from O ₂ Gas	W. H. Kleiner	Phys. Rev. <u>97</u> , 411 (1955)
161	Measurements of the Recombination Velocity at Germanium Surfaces	D. T. Stevenson R. J. Keyes	Physica <u>20</u> , 1041 (1954)
162	Trajectory-Tracer Study of Helix- and Band-Type Post-deflection Acceleration	G. C. Sponsler	J. Appl. Phys. <u>26</u> , 676 (1955)
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169	Channels and Excess Reverse Current in Grown Germanium p-n Junction Diodes	A. L. McWhorter R. H. Kingston	Proc. IRE <u>42</u> , 1376 (1954)
178	Transistors Convert Sine Waves to Pulses	I. L. Lebow R. E. McMahon R. H. Baker	Electronics <u>27</u> , No. 5, 160 (1954)
180	Digital Computer Plug-in Units and Associated Equipment	J. N. Harris F. L. McNamara	Elec. Eng. <u>74</u> , 326 (1955)
188	Speed and Accuracy of Reading Polar Coordinates on a Horizontal Plotting Table	B. F. Green, Jr. L. K. Anderson	J. Appl. Psychol. <u>39</u> , 227 (1955)
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210	Analogue Study of Electron Trajectories	G. C. Sponsler B. F. Logan G. R. Welti	J. Assoc. Comp. Mach. <u>2</u> , 28 (1955)

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246	Propagation of Short Radio Waves in a Normally Stratified Troposphere	T. D. Carroll R. M. Ring	Proc. IRE <u>43</u> , 1384 (1955)
248	Simplified Impurity Calculation	G. F. Koster J. C. Slater	Phys. Rev. <u>96</u> , 1208 (1954)
227	Extension of Hund's Rule	G. F. Koster	Phys. Rev. <u>98</u> , 514 (1955)
228	An Analysis of Perceptual Confusions Among Some English Consonants	G. A. Miller P. E. Nicely	J. Acoust. Soc. Am. <u>27</u> , 338 (1955)
230	Calculation of the Space Charge, Electric Field, and Free Carrier Concentration at the Surface of a Semiconductor	R. H. Kingston S. F. Neustadter	J. Appl. Phys. <u>26</u> , 718 (1955)
231	A Practical Method of Designing RC Active Filters	R. P. Sallen E. L. Key	Trans. IRE, PGCT <u>CT-2</u> , 74 (1955)
236	Antiferromagnetism	G. W. Pratt, Jr.	Phys. Rev. <u>97</u> , 926 (1955)
237	Water-Vapor-Induced n-Type Surface Conductivity on p-Type Germanium	R. H. Kingston	Phys. Rev. <u>98</u> , 1766 (1955)
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264	On a Class of Binary Sequences	N. Zierler	Proc. Am. Math. Soc. <u>7</u> , 675 (1956)
265	Density of States Curve for Nickel	G. F. Koster	Phys. Rev. <u>98</u> , 901 (1955)
267	On Entropy Equivalence in the Time- and Frequency-Domains	R. Price	Proc. IRE (Correspondence) <u>43</u> , 484 (1955)
270	Magnetic Materials for Digital Computer Components. II. Magnetic Characteristics of Ultra-Thin Molybdenum-Permalloy Cores	N. Menyuk	J. Appl. Phys. <u>26</u> , 692 (1955)
272	Excited Donor Levels in Silicon	W. H. Kleiner	Phys. Rev. <u>97</u> , 1722 (1955)
273	Measurement of Susceptibility Tensor in Ferrites	J. O. Artman P. E. Tannenwald	J. Appl. Phys. <u>26</u> , 1124 (1955)
275	A Note on the Envelope and Phase-Modulated Components of Narrow-Band Gaussian Noise	R. Price	Trans. IRE, PGIT <u>1T-1</u> , 9 (1955)
278	Multiple Resonances in Cobalt Ferrite	P. E. Tannenwald	Phys. Rev. <u>99</u> , 463 (1955)
287	The Cryotron - A Superconductive Computer Component	D. A. Buck	Proc. IRE <u>44</u> , 482 (1956)
298	Design Procedure for Junction Transistor Flip-Flops	R. E. McMahon	Electronic Design (October 1955)
299	Propagation and Plasma Oscillation in Semiconductors with Magnetic Fields	B. Lax L. M. Roth	Phys. Rev. <u>98</u> , 548 (1955)
308	Figure of Merit for Microwave Ferrites at Low and High Frequencies	B. Lax	J. Appl. Phys. <u>26</u> , 919 (1955)
315	New Magnetic Materials	J. B. Goodenough F. E. Vinal	MIT Reports on Research <u>6</u> , 1 (1955)
320	Investigations of Angular Scattering and Multipath Properties of Tropospheric Propagation of Short Radio Waves Beyond the Horizon	J. H. Chisholm P. A. Portmann J. T. deBettencourt J. F. Roche	Proc. IRE <u>43</u> , 1317 (1955).
323	Hall Theory in n-Type Germanium	L. Gold	Phys. Rev. <u>99</u> , 596 (1955)

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334	Direct-Reading Noise Figure Indicator	C. E. Chase	Electronics <u>28</u> , 161, No. 11, (1955)
338	Some Remarks on Statistical Detection	W. L. Root T. S. Pitcher	Trans. IRE, PGIT <u>IT-1</u> , 33 (1955)
342	Theory of New Ferrite Modes in Rectangular Waveguide	B. Lax K. J. Button	J. Appl. Phys. <u>26</u> , 1184 (1955)
343	New Ferrite Mode Configurations and Their Applications	B. Lax K. J. Button	J. Appl. Phys. <u>26</u> , 1186 (1955)
344	Investigations of Scattering and Multipath Properties of Ionospheric Propagation at Radio Frequencies Exceeding the MUF	W. G. Abel J. T. deBettencourt J. F. Roche J. H. Chisholm	Proc. IRE <u>43</u> , 1255 (1955)
347	High Pressure Leak Detector	W. Paul D. M. Warschauer	Rev. Sci. Instr. <u>26</u> , 731 (1955)
348	Determination of Zinc in Presence of Iron and Nickel	J. Lowen A. L. Carney	Anal. Chem. <u>27</u> , 1965 (1955)
351	UHF Long-Range Communications Systems	G. L. Mellen W. E. Morrow A. J. Poté W. H. Radford J. B. Wiesner	Proc. IRE <u>43</u> , 1269 (1955)
352	Diversity Reception in UHF Long-Range Communications	C. L. Mack	Proc. IRE <u>43</u> , 1281 (1955)
357	Theory of the Role of Covulence in the Perovskite-Type Manganites (La, M (II)) MnO ₃	J. B. Goodenough	Phys. Rev. <u>100</u> , 564 (1955)
365	Ferromagnetic Resonance in Manganese Ferrite Single Crystals	P. E. Tannenwald	Phys. Rev. <u>100</u> , 1713 (1955)
369	Maximal Orthogonal Orbitals	G. W. Pratt, Jr. S. F. Neustadter	Phys. Rev. <u>101</u> , 1248 (1956)
370	Relative Influence of Majority and Minority Carriers on Excess Noise in Semiconductor Filaments	L. Bess	J. Appl. Phys. <u>26</u> , 1377 (1955)
373	Vacuum and Vibration Speed Assembly of Core Memory Planes	E. A. Guditz L. B. Smith	Electronics <u>29</u> , No. 2, 214 (1956)

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381	The Uniqueness of Laplace Integrals	E. J. Akutowicz	Duke Math. J. 23, 165 (1956)
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394	Statistics and Galvanomagnetic Effects in Germanium and Silicon with Warped Energy Surfaces	B. Lax J. G. Mavroides	Phys. Rev. 100, 1650 (1955)
397	On the Scattering of Radio Waves by Turbulent Fluctuations of the Atmosphere	F. Villars V. F. Weisskopf	Proc. IRE 43, 1232 (1955)
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410 R	An Analysis of Signal Detection and Location by Digital Methods	G. P. Dinneen I. S. Reed	Trans. IRE, PGIT IT-2, 29 (1956)
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416 R	Effect of Dislocations on the Minority Carrier Lifetime in Semiconductors	A. D. Kurtz S. A. Kulin B. L. Averbach	Phys. Rev. 101, 1285 (1956)
418	Microwave Resonance Relations in Anisotropic Single Crystal Ferrites	J. O. Artman	Proc. IRE 44, 1284 (1956)
421	Progress of Tropospheric Propagation Research Related to Communications Beyond the Horizon	J. H. Chisholm	Trans. IRE, PGCS CS-4, 6 (1956)
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428	Rapid, Precise Measurements of Krypton Adsorption and the Surface Area of Coarse Particles	A. J. Rosenberg	J. Am. Chem. Soc. <u>78</u> , 2929 (1956)
430	Bistable Circuit Uses Single Triode	R. W. Hofheimer	Electronics <u>29</u> , No. 3, 230 (1956)
433	Effects of Growth Rate on Crystal Perfection and Lifetime in Germanium	A. D. Kurtz S. A. Kulin B. L. Averbach	J. Appl. Phys. <u>27</u> , 1287 (1956)
443 R	First-Order Markov Process Representation of Binary Radar Data Sequences	G. C. Sponsler	Trans. IRE, PGIT <u>IT-3</u> , 56 (1957)
446	On the Determination of the Phase of a Fourier Integral, I	E. J. Akutowicz	Trans. Am. Math. Soc. <u>83</u> , 479 (1956)
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449	Galvanomagnetic Theory for Electrons in Germanium and Silicon: Magnetoresistance in the High-Field Saturation Limit	L. Gold L. M. Roth	Phys. Rev. <u>103</u> , 61 (1956)
456	Estimating the Ratio of Steady Sinusoidal Signal to Random Noise from Experimental Data	M. L. Phillips	Proc. IRE (Correspondence) <u>44</u> , 692 (1956)
459 R	Interpretation of Domain Patterns Recently Found in BiMn and SiFe Alloys	J. B. Goodenough	Phys. Rev. <u>102</u> , 356 (1956)
462 R	Designing for Reliability	N. H. Taylor	Proc. IRE <u>45</u> , 811 (1957)
476	The Spectral Resolution of Watson Transforms	E. J. Akutowicz	Proc. Cambridge Phil. Soc. <u>54</u> , 368 (1958)
480 R	Session on Rapid-Access Storage, Including the Use of Magnetic Cores for Storage and Switching	N. H. Taylor	Proc. IEE (London) <u>103</u> , 289 (1956)
482 R	Some Effects of Unequal Spatial Distribution on the Detectability of Radar Targets	P. E. Nicely G. A. Miller	J. Exptl. Psychol. <u>53</u> , 195 (1957)
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495 R	High Pressure Tubing	W. Paul D. M. Warschauer	Rev. Sci. Instr. <u>27</u> , 418 (1956)
496 R	Infrared Windows for Helium Cryostats	D. M. Warschauer W. Paul	Rev. Sci. Instr. <u>27</u> , 419 (1956)
498 R	Theory of Cyclotron Resonance Absorption in Many-Valley Semiconductors	L. Gold W. M. Bullis R. A. Campbell	Phys. Rev. <u>103</u> , 1250 (1956)
507 R	Anisotropy of Cobalt-Substituted Mn Ferrite Single Crystals	P. E. Tannenwald M. H. Seavey, Jr.	Proc. IRE <u>44</u> , 1343 (1956)
510 R	Serial Effects in Auditory Threshold Judgments	W. J. McGill §	J. Exptl. Psychol. <u>53</u> , 297 (1957)
512	Microwave Resonance Relations in Anisotropic Single Crystal Ferrites	J. O. Artman	Phys. Rev. <u>105</u> , 62 (1957)
514 R	Transistorized Receiver for Vehicular Radio	S. Schwartz	Electronics <u>29</u> , No. 10, 217 (1956)
516 R	Classical Boltzmann Theory of Cyclotron Resonance for Warped Surfaces	H. J. Zeiger B. Lax R. N. Dexter	Phys. Rev. <u>105</u> , 495 (1957)
517	Cyclotron Resonance Experiments in Silicon and Germanium	R. N. Dexter H. J. Zeiger B. Lax	Phys. Rev. <u>104</u> , 637 (1956)
519 R	Strip Line Hybrid Junction	H. G. Pascalar	Trans. IRE, PGMFT <u>MTT-5</u> , 23 (1957)
521	Frequency and Loss Characteristics of Microwave Ferrite Devices	B. Lax	Proc. IRE <u>44</u> , 1368 (1956)
522	Coil for Pulsed Megagauss Fields	S. Foner H. H. Kolm	Rev. Sci. Instr. <u>27</u> , 547 (1956)
524 R	Vibrating Sample Magnetometer	S. Foner	Rev. Sci. Instr. <u>27</u> , 548 (1956)
528 R	Sets of Measures Not Admitting Necessary and Sufficient Statistics of Subfields	T. S. Pitcher	Ann. Math. Stat. <u>28</u> , 267 (1957)
532	Measurement of Reproducibility	B. W. White E. Saltz	Psychol. Bull. <u>54</u> , 81 (1957)
534 R	Positivity in H-Systems and Sufficient Statistics	T. S. Pitcher	Trans. Am. Math. Soc. <u>85</u> , 166 (1957)

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546 R	A Bibliography of Soviet Literature on Noise, Correlation, and Information Theory	P. E. Green, Jr.	Trans. IRE, PGIT <u>IT-2</u> , 94 (1956)
549	The Anisotropy of the Hot-Electron Problem in Semiconductors with Spheroidal Energy Surfaces	L. Gold	Phys. Rev. <u>104</u> , 1580 (1956)
552	Galvanomagnetic Effects in Oriented Single Crystals of n-Type Germanium	W. M. Bullis	Phys. Rev. <u>109</u> , 292 (1958)
558 R	Microwave Propagation Well Beyond the Horizon from Marconi to the Present	T. J. Carroll	L'Onde Elec. (Paris) <u>37</u> , 421 (1957)
561	On the Preparation and Regeneration of Clean Germanium Surfaces	P. H. Robinson A. J. Rosenberg H. C. Gatos	J. Appl. Phys. <u>27</u> , 962 (1956)
566 R	Transistorized-Core Memory	R. E. McMahon	Trans. IRE, PGI <u>I-6</u> , 157 (1957)
566A	The Noise Problem in a Coincident-Current Core Memory	F. L. McNamara	Trans. IRE, PGI <u>I-6</u> , 153 (1957)
574 R	Some Observations on Scattering by Turbulent Inhomogeneities	M. Balser	Trans. IRE, PGAP <u>AP-5</u> , 383 (1957)
576 R	Magnetization Reversal in Thin Films	D. O. Smith	Phys. Rev. <u>104</u> , 1280 (1956)
577 R	Boosting Transistor Switching Speed	R. H. Baker	Electronics <u>30</u> , No. 3, 190 (1957)
580	On the Estimation in the Presence of Noise of the Impulse Response of a Random, Linear Filter	G. L. Turin	Trans. IRE, PGIT <u>IT-3</u> , 5 (1957)
581 R	A Decomposition Theorem for the Integers Modulo q	N. Zierler	Am. Math. Monthly <u>65</u> , 31 (1958)
583 R	Power Generation and Distribution at Air Defense Computing Centers	J. J. Gano	Elec. Eng. <u>75</u> , 1098 (1956)
591	A Radar Detection Philosophy	W. M. Siebert	Trans. IRE, PGIT <u>IT-2</u> , 204 (1956)
592	Systems Analysis of Discrete Markov Processes	R. W. Sittler	Trans. IRE, PGCT <u>CT-3</u> , 257 (1956)

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601 R	Rotating Electrometer for Comparative Work Function Measurements	H. H. Kolm	Rev. Sci. Instr. <u>27</u> , 1046 (1956)
605	A Revised Law of Comparative Judgment	W. P. Harris	Psychometrika <u>22</u> , 189 (1957)
613 R	Arithmetical Analysis of Digital Computing Nets	R. C. Jeffrey	J. Assoc. Comp. Mach. <u>3</u> , 360 (1956)
617	Optimum Detection of Random Signals in Noise, with Application to Scatter-Multipath Communication, I	R. Price	Trans. IRE, PGIT <u>IT-2</u> , 125 (1956)
618 R	Broad-Band Balanced Duplexers	C. W. Jones	Trans. IRE, PGMFT <u>MFT-5</u> , 4 (1957)
620 R	Ferrites as Microwave Circuit Elements	G. S. Heller	Proc. IRE <u>44</u> , 1386 (1956)
621 R	Variational Principles for Guided Electromagnetic Waves in Anisotropic Materials	W. Hauser	Quart. Appl. Math. <u>16</u> , 159 (1958)
628	Galvanomagnetic Theory for n-Type Germanium and Silicon: Hall Theory and General Behavior of Magnetoresistance	L. Gold L. M. Roth	Phys. Rev. <u>107</u> , 358 (1957)
633 R	Unsupported Area High Pressure Seal	D. M. Warschauer W. Paul	Rev. Sci. Instr. <u>28</u> , 62 (1957)
634 R	Kinetic Theory of Space Charge, I: Cutoff Character of the Static Magnetron	L. Gold	J. Electron. and Control <u>3</u> , 97 (1957)
639 R	Space Charge in the Relativistic Magnetron	L. Gold	J. Electron. and Control <u>3</u> , 87 (1957)
642 R	Ferromagnetic Resonance in Thin Films of Permalloy	P. E. Tannenwald M. H. Seavey, Jr.	Phys. Rev. <u>105</u> , 377 (1957)
647	The Output Signal-to-Noise Ratio of Correlation Detectors	P. E. Green, Jr.	Trans. IRE, PGIT <u>IT-3</u> , 10 (1957)
649 R	The Elimination of Motor-Generator Sets as Transient Buffers for SAGE Computers	J. J. Gano	Trans. IEE, Commun. Electron. No. 32, 468 (1957)

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650	Magneto-Band Effects in InAs and InSb in DC and High-Pulsed Magnetic Fields	S. Zwerdling R. J. Keyes S. Foner H. H. Kolm B. Lax	Phys. Rev. <u>104</u> , 1805 (1956)
651	Infrared Cyclotron Resonance in Bi, InSb and InAs with High-Pulsed Magnetic Fields	R. J. Keyes S. Zwerdling S. Foner H. H. Kolm B. Lax	Phys. Rev. <u>104</u> , 1804 (1956)
657 R	Thermistors for the Gradual Application of Heater Voltage in Thermionic Tubes	J. J. Gano G. F. Sandy	Trans. IRE, PGEC <u>EC-7</u> , 61 (1958)
658 R	Inverse Bessel Functions: Solution for the Zeros	L. Gold	J. Math. Phys. <u>36</u> , 167 (1957)
667	Measurement of Ionospheric Path-Phase for Oblique Incidence	R. Price P. E. Green, Jr.	Nature <u>179</u> , 372 (1957)
669 R	Possible Interpretation of Cyclotron Resonance Absorption in Graphite	B. Lax H. J. Zeiger	Phys. Rev. <u>105</u> , 1466 (1957)
675	Simulation Techniques for the Test and Evaluation of Real-Time Computer Programs	D. R. Israel	J. Assoc. Comp. Mach. <u>4</u> , 354 (1957)
681	Exchange and Superexchange Coupling Between Conduction Electrons and d Electrons in Magnetic Materials	G. W. Pratt, Jr.	Phys. Rev. <u>106</u> , 53 (1957)
682	New Computer - Does More with Less	F. P. Hazel	MIT Reports on Research <u>8</u> , 3 (1956)
683 R	The Effect of Signal Rate on Performance in Visual Monitoring	H. M. Jenkins	Am. J. Psychol. <u>71</u> , 647 (1959)
686 R	The Autocorrelogram of a Complete Carrier Wave Received over the Ionosphere at Oblique Incidence	R. Price	Proc. IRE <u>45</u> , 879 (1957)
702 R	Oscillatory Magneto-Absorption of the Direct Transition in Germanium	S. Zwerdling B. Lax	Phys. Rev. <u>106</u> , 51 (1957)
704 R	On the Theory of Anisotropic Obstacles in Cavities	W. Hauser	Quart. J. Mech. Appl. Math. <u>11</u> , 112 (1958)
707	Multipath Transmission	P. E. Green, Jr. R. Price	MIT Reports on Research <u>8</u> , 4 (1957)

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716 R	Concerning the Effect of Illumination Upon Measurements of Gas Adsorption	A. J. Rosenberg C. S. Martel, Jr.	J. Phys. Chem. <u>61</u> , 512 (1957)
724 R	Radar Horizon and Propagation Loss	M. I. Skolnik	Proc. IRE (Correspondence) <u>45</u> , 697 (1957)
730	Very Narrow Base Diode	R. H. Rediker D. E. Sawyer	Proc. IRE <u>45</u> , 944 (1957)
735	3-D Printed Circuits Speed Memory Plane Assembly	E. A. Guditz	MIT Reports on Research <u>8</u> , 3 (1957)
743 R	Experimental Investigations of the Electronic Band Structure of Solids	B. Lax	Rev. Modern Phys. <u>30</u> , 122 (1958)
747 R	Smooth Random Functions Need Not Have Smooth Correlation Functions	D. G. Brennan	Proc. IRE (Correspondence) <u>45</u> , 1016 (1957)
752	Investigation of Long-Distance Over-Water Tropospheric Propagation at 400 Mcps	H. E. Dinger § W. E. Garner § D. H. Hamilton, Jr. A. E. Teachman	Proc. IRE <u>46</u> , 1401 (1958)
763 R	Hydrolysis of $A^{III}B^V$ Intermetallic Compounds	J. A. Kafalas H. C. Gatos M. J. Button	J. Am. Chem. Soc. <u>79</u> , 4260 (1957)
766 R	Three-Dimensional Printed Wiring	E. A. Guditz	Electronics <u>30</u> , No. 6, 160 (1957)
768 R	Rare Earth Nickel Oxides	A. Wold B. Post § E. Banks	J. Am. Chem. Soc. <u>79</u> , 4911 (1957)
770 R	UHF Radar Observations of Aurora	S. J. Fricker R. P. Ingalls M. L. Stone S. C. Wang	J. Geophys. Res. <u>62</u> , 527 (1957)
772 R	High Field Antiferromagnetic Resonance in MnF_2 Using Pulsed Fields and Millimeter Wavelengths	S. Foner	Phys. Rev. <u>107</u> , 683 (1957)
773 R	Wave Functions and Energy Levels for Fe as Found by the Unrestricted Hartree-Fock Method	J. H. Wood § G. W. Pratt, Jr.	Phys. Rev. <u>107</u> , 995 (1957)
774 R	High-Speed Computer Stores 2.5 Megabits	W. N. Papian	Electronics <u>30</u> , No. 10, 162 (1957)
780 R	Singular Functions Associated with Markov Chains	J. R. Kinney	Proc. Am. Math. Soc. <u>9</u> , 603 (1958)

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783 R	Reaction of Germanium with Aqueous Solutions. I. Dissolution Kinetics in Water Containing Dissolved Oxygen	W. W. Harvey H. C. Gatos	J. Electrochem. Soc. <u>105</u> , 654 (1958)
787	A Communication Technique for Multipath Channels	R. Price P. E. Green, Jr.	Proc. IRE <u>46</u> , 555 (1958)
791 R	Magnetoresistance of Holes in Germanium and Silicon with Warped Energy Surfaces	J. G. Mavroides B. Lax	Phys. Rev. <u>107</u> , 1530 (1957)
793 R	Optical Properties of Semiconductors Under Hydrostatic Pressure - I. Germanium	W. Paul D. M. Warschauer	J. Phys. Chem. Solids <u>5</u> , 89 (1958)
807	Coils for the Production of High Intensity Pulsed Magnetic Fields	S. Foner H. H. Kolm	Rev. Sci. Instr. <u>28</u> , 799 (1957)
810	3-D Packaging for Transistorized Circuits	J. A. Wereb, Jr.	Electronics <u>30</u> , No. 11, 244 (1957)
811 R	Work-Function Studies of Germanium Crystals Cleaned by Ion Bombardment	J. A. Dillon, Jr. § H. E. Farnsworth	J. Appl. Phys. <u>28</u> , 174 (1957)
813	Extend Output with Regulated Flip-Flop	R. W. Hofheimer	Electronics <u>30</u> , No. 12, 182 (1957)
814 R	Lanthanum Rhodium and Lanthanum Cobalt Oxides	A. Wold B. Post § E. Banks	J. Am. Chem. Soc. <u>79</u> , 6365 (1957)
817	Solid-State Maser Amplifier	A. L. McWhorter J. W. Meyer	Phys. Rev. <u>109</u> , 312 (1958)
823 R	On the Theorem of Gleason and Marsh	N. Zierler	Proc. Am. Math. Soc. <u>9</u> , 236 (1958)
831 R	Apparatus for the Direct Measurement of Adsorption on Solid Surfaces from Liquids	J. A. Kafalas H. C. Gatos	Rev. Sci. Instr. <u>29</u> , 47 (1958)
835	Theory of Antiferromagnetic-Ferromagnetic Transitions in Dilute Magnetic Alloys and in the Rare Earths	G. W. Pratt, Jr.	Phys. Rev. <u>108</u> , 1233 (1957)
839	Studies on Group III-V Intermetallic Compounds	C. R. Kolm S. A. Kulin B. L. Averbach	Phys. Rev. <u>108</u> , 965 (1957)
840	Band Structure and Cohesive Energy of Potassium Chloride	L. P. Howland	Phys. Rev. <u>109</u> , 1927 (1958)
843	The Status of Microwave Applications of Ferrites and Semiconductors	B. Lax	Trans. IRE, PGMTT <u>MTT-6</u> , 6 (1958)

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845 R	Optical Properties of Semiconductors Under Hydrostatic Pressure. II. Silicon	W. Paul D. M. Warschauer	J. Phys. Chem. Solids 5, 102 (1958)
848	Statistics of Polymer Molecular Size Distribution for an Invariant Number of Propagating Chains	L. Gold	J. Chem. Phys. 28, 94 (1958)
849 R	Parametric Solution for the Diode Space Charge at Relativistic Energies	L. Gold	J. Electron. and Control 3, 564 (1957)
854	The Persistrion - A Steady Information Display Panel for a Pulsed Signal Input	J. R. Leibowitz W. L. Gardner	Trans. IRE, PGED ED-5, 115 (1958)
855 R	Generating Characters for Cathode-Ray Readout	K. E. Perry E. J. Aho	Electronics 31, No. 4, 72 (1958)
862 R	Some Magnetic and Crystallographic Properties of the System $\text{Li}_x^{+}\text{Ni}_{1-2x}^{++}\text{Ni}_x^{+++}\text{O}$	J. B. Goodenough D. G. Wickham W. J. Croft	J. Phys. Chem. Solids 5, 107 (1958)
864 R	Measurement of Ferrite Isolation at 1300 Mcps	G. S. Heller G. W. Catuna	Trans. IRE, PGM TT MTT-6, 97 (1958)
875	Oscillatory Magneto-Absorption in Semiconductors	S. Zwerdling B. Lax L. M. Roth	Phys. Rev. 108, 1402 (1957)
881 R	Loss of Signal Detectability in Band-Pass Limiters	R. Manasse R. M. Lerner R. Price	Trans. IRE, PGIT IT-4, 34 (1958)
884 R	On the Theory of Anisotropic Obstacles in Waveguides	W. Hauser	Quart. J. Mech. Appl. Math. 11, 427 (1958)
886 R	Microvariations of Water Vapor in the Lower Troposphere with Applications to Long-Range Radio Communications	J. R. Bauer J. H. Meyer	Trans. Am. Geophys. Un. 39, 624 (1958)
888 R	The Reaction of Germanium with Nitric Acid Solutions; I. The Dissolution Reaction; II. Passivity of Germanium	M. C. Lavine H. C. Gatos	J. Electrochem. Soc. 105, 487 (1958)
890 R	Theoretical Analysis of the Operation of the Field-Displacement Ferrite Isolator	K. J. Button	Trans. IRE, PGM TT MTT-6, 303 (1958)
891	An Interpretation of the Magnetic Properties of the Perovskite-Type Mixed Crystals $\text{La}_{1-x}^{+}\text{Sr}_x^{+}\text{CoO}_{3-\lambda}^{-}$	J. B. Goodenough	J. Phys. Chem. Solids 6, 287 (1958)

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892	The Free-Energy Changes Attending the Martensitic Transformation in the Iron-Chromium and Iron-Chromium-Nickel Systems	L. Kaufman	Trans. AIME, Met. Soc. <u>215</u> , 218 (1959)
893 R	Thermal Restoration of Oxygenated Germanium Surfaces	A. J. Rosenberg P. H. Robinson H. C. Gatos	J. Appl. Phys. <u>29</u> , 771 (1958)
894 R	Influence of Crystal Orientation on the Surface Behavior of InSb	M. C. Lavine A. J. Rosenberg H. C. Gatos	J. Appl. Phys. <u>29</u> , 1131 (1958)
896	Noise Temperature Measurement on a Solid State Maser	A. L. McWhorter J. W. Meyer P. D. Strum	Phys. Rev. <u>108</u> , 1642 (1957)
897	Discussion of the Paper: "Detection of Pulse Signals in Noise: Trace-to-Trace Correlation in Visual Displays," D. G. Tucker, J. Brit. I. R. E. <u>17</u> , 319 (1957)	M. I. Skolnik	J. Brit. IRE <u>17</u> , 705 (1957)
900 R	SAGE Data System Considerations	R. G. Enticknap E. F. Schuster §	Trans. IEE, Commun. Electron. No. 34, 824 (1959)
902	Thermal Transpiration of Gases at Low Pressures	A. J. Rosenberg C. S. Martel, Jr.	J. Phys. Chem. <u>62</u> , 457 (1958)
903	Radio Observations of the Russian Earth Satellite	R. R. Brown P. E. Green, Jr. B. Howland R. M. Lerner R. Manasse G. H. Pettengill	Proc. IRE (Correspondence) <u>45</u> , 1552 (1957)
906 R	Ferromagnetic Resonance at UHF in Thin Films	R. H. Kingston P. E. Tannenwald	J. Appl. Phys. <u>29</u> , 232 (1958)
909	A Binary Algebra Describing Crystal Structures with Closely-Packed Anions	A. L. Loeb	Acta Cryst. <u>11</u> , 469 (1958)
911	Ultrasonic-Delay-Line Terminating Circuits and Bandpass Measurements	M. Axelbank	Proc. IRE <u>46</u> , 649 (1958)
920 R	Spring Loaded Differential Drive	G. R. Heidler	Machine Design <u>30</u> , 140 (1958)
921 R	Transient Response of Drift Transistors	R. C. Johnston	Proc. IRE <u>46</u> , 830 (1958)
927	X-Ray Analysis of Deformed Germanium, Gallium Antimonide, and Indium Antimonide	C. R. Kolm E. P. Warekois S. A. Kulin	Trans. AIME, Met. Soc. <u>212</u> , 827 (1958)

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938 R	Electrolytic Cell for Precision Electrode Kinetic Studies	S. Sheff H. C. Gatos S. Zwerdling	Rev. Sci. Instr. <u>29</u> , 531 (1958)
939	Linear Recurring Sequences	N. Zierler	J. Soc. Ind. Appl. Math. <u>7</u> , 31 (1959)
941	A UHF Solid State Maser	R. H. Kingston	Proc. IRE (Correspondence) <u>46</u> , 916 (1958)
943 R	A Useful Theorem for Non-linear Devices Having Gaussian Inputs	R. Price	Trans. IRE, PGIT <u>IT-4</u> , 69 (1958)
946 R	The Spectrophotometric Determination of Microgram Quantities of Indium	J. E. Johnson M. C. Lavine A. J. Rosenberg	Anal. Chem. <u>30</u> , 2055 (1958)
949 R	Cataracts and Ultra-High Frequency Radiation	S. J. Fricker D. G. Cogan § D. D. Donaldson § M. Lubin § H. Hardy §	AMA Arch. Ind. Med. <u>18</u> , 299 (1958)
951 R	Theory of Nonreciprocal Ferrite Phase Shifters in Dielectric Loaded Coaxial Line	K. J. Button	J. Appl. Phys. <u>29</u> , 998 (1958)
959	System-Noise Measurement of a Solid-State Maser	A. L. McWhorter F. R. Arams §	Proc. IRE (Correspondence) <u>46</u> , 913 (1958)
960 R	Direct Transition Exciton and Fine Structure of the Magneto-Absorption Spectrum in Germanium	S. Zwerdling L. M. Roth B. Lax	Phys. Rev. <u>109</u> , 2207 (1958)
964	Detection of Statistically Defined Patterns in a Matrix of Dots	B. F. Green, Jr. A. K. Wolf B. W. White	Am. J. Psychol. <u>72</u> , 503 (1959)
968 R	Configuration Interaction in the Hydrogen Fluoride Molecule	A. M. Karo L. C. Allen §	J. Am. Chem. Soc. <u>80</u> , 4496 (1958)
976 R	Likelihood Ratios of Gaussian Processes	T. S. Pitcher	Arkiv Mat. <u>4</u> , 35 (1959)
977 R	21-Centimeter Solid State Maser	S. H. Autler N. McAvoy §	Phys. Rev. <u>110</u> , 280 (1958)
978 R	Measurements of the Bandwidth of Radio Waves Propagated by the Troposphere Beyond the Horizon	J. H. Chisholm L. P. Rainville J. F. Roche H. G. Root	Trans. IRE, PGAP <u>AP-6</u> , 377 (1958)
979 R	A Synthesis Procedure for Transmission Line Networks	A. I. Grayzel	Trans. IRE, PGCT <u>CT-5</u> , 172 (1958)
983 R	Locally Compact Division Rings	E. Weiss N. Zierler	Pacific J. Math. <u>8</u> , 369 (1958)

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992 R	Outdiffusion as a Technique for the Production of Diodes and Transistors	J. Halpern R. H. Rediker	Proc. IRE <u>46</u> , 1068 (1958)
996 R	Narrow Base Germanium Photodiodes	D. E. Sawyer R. H. Rediker	Proc. IRE <u>46</u> , 1122 (1958)
998	The Chemical Behavior of Semiconductor Surfaces Germanium and Al _{1-x} B _x V Intermetallic Compounds	H. C. Gatos	Chem. Chron. Greek Chem. Soc. <u>23A</u> , 78 (1958)
999 R	Stable, Low-Cost One-Mc Oscillator	J. F. Mercurio, Jr.	Electronics <u>32</u> , No. 6, 50 (1959)
1000	On Extrapolating a Positive Definite Function from a Finite Interval	E. J. Akutowicz	Math. Scand. <u>7</u> , 157 (1959)
1001 R	Digital Rate Synthesis for Frequency Measurement and Control	T. J. Rey	Proc. IRE <u>47</u> , 2106 (1959)
1002 R	The Solid State Maser - A Super-cooled Amplifier	J. W. Meyer	Electronics <u>31</u> , No. 17, 66 (1958)
1003	Complex Analyses of Variance: General Problems	B. F. Green, Jr. J. W. Tukey §	Psychometrika <u>25</u> , 127 (1960)
1006 R	Optical Properties of Semiconductors under Hydrostatic Pressure. III. Germanium-Silicon Alloys	D. M. Warschauer W. Paul	J. Phys. Chem. Solids <u>6</u> , 6 (1958)
1007 R	Kinetics of the Cathodic Reduction of Anions: Germanium Oxides	P. H. Robinson M. Green	J. Electrochem. Soc. <u>106</u> , 253 (1959)
1008 R	Broad-Band Amplifier for Radar and Scatter	J. H. Phillips E. Maxwell	Electronics <u>31</u> , No. 39, 81 (1958)
1009 R	Recognition of Distorted Melodies	B. W. White	Am. J. Psychol. <u>73</u> , 100 (1960)
1019 R	Electrode Potential of Germanium in Aqueous Solutions and the Effect of Illumination	W. W. Harvey H. C. Gatos	J. Appl. Phys. <u>29</u> , 1267 (1958)
1021 R	Propagation of Ordinary Sound in Liquid Helium Near the λ Point	C. E. Chase	Phys. Fluids <u>1</u> , 193 (1958)
1022	Microwave Resonance in Thin Ferromagnetic Films	P. E. Tannenwald M. H. Seavey, Jr.	J. Phys. Radium <u>20</u> , 323 (1959)
1025 R	High Pressure Techniques	D. M. Warschauer W. Paul	Rev. Sci. Instr. <u>29</u> , 675 (1958)
1027 R	Linear Diversity Combining Techniques	D. G. Brennan	Proc. IRE <u>47</u> , 1075 (1959)

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1032	A Figure of Merit for Catheter Sampling Systems	H. Sherman W. L. Kraus C. B. Moore R. C. Schlant	Circulation Res. <u>7</u> , 303 (1959)
1044 R	Crystallographic and Magnetic Properties of Several Spinel Containing Trivalent Manganese	D. G. Wickham W. J. Croft	J. Phys. Chem. Solids <u>7</u> , 351 (1958)
1050 R	Proposal for a Maser-Amplifier System Without Nonreciprocal Elements	S. H. Autler	Proc. IRE (Correspondence) <u>46</u> , 1880 (1958)
1051 R	Statistical Theory of Irreversible Processes: I. Integral Over Fluctuation Path Formulation	D. Falkoff §	Ann. Phys. (MIT) <u>4</u> , 325 (1958)
1055 R	The Adsorption of Krypton on Germanium	A. J. Rosenberg	J. Phys. Chem. <u>62</u> , 1112 (1958)
1057	The Lincoln Keyboard — A Type-writer Keyboard Designed for Computer Input Flexibility	A. Vanderburgh, Jr.	Commun. ACM <u>1</u> , 3 (1958)
1058 R	Empirical Test of an Additive Random Number Generator	B. F. Green, Jr. J. E. K. Smith L. Klem	J. Assoc. Comp. Mach. <u>6</u> , 527 (1959)
1059 R	Observation of Microwave Cyclotron Resonance by Cross Modulation	H. J. Zeiger C. J. Rauch M. E. Behrndt	Phys. Rev. Letters <u>1</u> , 59 (1958)
1064 R	Resistance Thermometer Bridge for Measurement of Temperatures in the Liquid Helium Range	C. Blake C. E. Chase E. Maxwell	Rev. Sci. Instr. <u>29</u> , 715 (1958)
1072	A Non-Real-Time Simulation of SAGE Tracking and BOMARC Guidance	D. W. Ladd, Jr. E. W. Wolf	Trans. IRE, PGEC EC-8, 36 (1959)
1074 R	A UHF Solid State Maser	R. H. Kingston	Trans. IRE, PGM TT MTT-7, 92 (1959)
1076 R	Low-Temperature Transition of Magnetic Anisotropy in Nickel-Iron Ferrite	N. Menyuk K. Dwight	Phys. Rev. <u>112</u> , 397 (1958)
1077 R	Preparation and Properties of the Systems in $\text{LnFe}_x\text{Cr}_{1-x}\text{O}_3$ and $\text{LaFe}_x\text{Co}_{1-x}\text{O}_3$	A. Wold W. Croft	J. Phys. Chem. <u>63</u> , 447 (1959)
1078	"Magnetogenies," or The Art of Generating High Magnetic Fields	H. H. Kolm S. Foner	Kelvin Seale Supplement, Arthur D. Little, Inc. (1959)

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1085	Exciton and Magneto-Absorption of the Direct and Indirect Transitions in Germanium	S. Zwerdling B. Lax L. M. Roth K. J. Button	Phys. Rev. <u>114</u> , 80 (1959)
1086	Theory of Optical Magneto-Absorption Effects in Semiconductors	L. M. Roth B. Lax S. Zwerdling	Phys. Rev. <u>114</u> , 90 (1959)
1087	MIT Lincoln Laboratory Milestones	J. T. Gilmore, Jr.	Commun. ACM <u>1</u> , 39 (1958)
1089 R	The Morse Distribution	M. Freimer B. Gold A. L. Tritter	Trans. IRE, PGIT <u>IT-5</u> , 25 (1959)
1093 R	Zero-Crossing Technique Using TV Techniques	J. A. Wereb, Jr.	Electronics <u>32</u> , No. 19, 64 (1959)
1097 R	Quarter Wave Compensation of Resonant Discontinuities	C. E. Muche, Jr.	Trans. IRE, PGMTT <u>MTT-7</u> , 2 (1959)
1102	Stress Analysis of a Large Radar Antenna by Digital Computer	S. Namyot § J. M. Biggs §	Civil Engineering <u>29</u> , 54 (1959)
1103 R	Quantum-Mechanical Three-Body Problem	L. Eyges	Phys. Rev. <u>115</u> , 1643 (1959)
1105 R	Direct Observation of Spin-Wave Resonance	M. H. Seavey, Jr. P. E. Tannenwald	Phys. Rev. Letters <u>1</u> , 168 (1958); J. Appl. Phys. Suppl. <u>30</u> , 227S (1959)
1106 R	Preparation and Crystallographic Properties of the Systems $\text{LaMn}_{1-x}\text{Mn}_x\text{O}_{3+\lambda}$ and $\text{LaMn}_{1-x}\text{Ni}_x\text{O}_{3+\lambda}$	A. Wold R. J. Arnott	J. Phys. Chem. Solids <u>9</u> , 176 (1959)
1107 R	On the Reciprocity of HF Ionospheric Transmission	M. Balser W. B. Smith E. Warren	J. Geophys. Res. <u>63</u> , 859 (1958)
1108 R	Comparison of Measured and Computed Values of the Rapid Fading-Rate of Ultra High-Frequency Signals Reflected from the Moon	S. J. Fricker R. P. Ingalls W. C. Mason M. L. Stone	Nature <u>182</u> , 1438 (1958)
1123 R	Machine Recognition of Hand Sent Morse Code	B. Gold	Trans. IRE, PGIT <u>IT-5</u> , 17 (1959)
1132 R	On the Matrix Riccati Equation	J. J. Levin	Proc. Am. Math. Soc. <u>10</u> , 519 (1959)
1133	Rigid Radome Design Considerations	P. Davis A. Cohen	Electronics <u>32</u> , No. 16, 66 (1959)

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1134 R	Syringe-Type Single-Crystal Furnace for Materials Containing a Volatile Constituent	P. L. Moody C. R. Kolm	Rev. Sci. Instr. <u>29</u> , 1144 (1958)
1138 R	Resonance Isolator at 70 kMcps	L. C. Kravitz G. S. Heller	Proc. IRE (Correspondence) <u>47</u> , 331 (1959)
1143 R	Connections Plated With Wiring	E. A. Guditz	Electronics <u>32</u> , No. 54, 96 (1959)
1143A R	Lincoln Lab Builds Electronic Package Backwards	E. A. Guditz	Business Week (2 January 1960)
1144 R	Configuration Interaction in the Lithium Hydride Molecule. I. A Determinantal AO Approach	A. M. Karo A. R. Olson	J. Chem. Phys. <u>30</u> , 1232 (1959)
1145 R	Configuration Interaction in the Lithium Hydride Molecule. II. An SCF LCAO-MO Approach	A. M. Karo	J. Chem. Phys. <u>30</u> , 1244 (1959)
1146 R	Serial Position and the Memory-Span	N. C. Waugh	Am. J. Psychol. <u>73</u> , 68 (1960)
1149	Oscillatory Magneto-Absorption in Gallium Antimonide	S. Zwerdling B. Lax K. J. Button L. M. Roth	J. Phys. Chem. Solids <u>9</u> , 320 (1959)
1155	X-Ray Method for the Differentiation of {111} Surfaces in Al _{III} B _V Semiconducting Compounds	E. P. Warekois P. H. Metzger	J. Appl. Phys. <u>30</u> , 960 (1959)
1173 R	An Electron Population Analysis of LiH and HF	A. M. Karo	J. Chem. Phys. <u>3</u> , 182 (1959)
1183 R	Ground Radomes	S. C. Nilo	SPE J. <u>15</u> , 457 (1959)
1184	Characteristics of the Human Operator in Simple Manual Control Systems	J. I. Elkind C. D. Forgie	Trans. IRE, PGAC <u>AC-4</u> , 44 (1959)
1186 R	Half-Cycle Resonant Delay Circuit	B. Howland	Proc. IRE (Correspondence) <u>47</u> , 993 (1959)
1189	Electroplated Electrical Connections and Improved Through-Hole Printed Wiring	E. B. Murphy	Plating <u>46</u> , 848 (1959)
1190 R	Air Defense Research in the Space Age	C. F. J. Overhage	Tech. Rev. <u>61</u> , 239 (1959)
1193 R	The Probability Density of the Output of a Filter When the Input Is a Random Telegraphic Signal: Differential-Equation Method	J. A. McFadden	Trans. IRE, PGCT <u>CT-6</u> , 228 (1959); Trans. IRE, PGIT <u>IT-5</u> , 228 (1959)

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1194 R	The Detection of Radar Echoes in Noise. Part I: Statistical Preliminaries and Detector Design; Part II: The Accuracy of Radar Measurements	E. J. Kelly, Jr. I. S. Reed W. L. Root	J. Soc. Ind. Appl. Math. <u>8</u> , 309 (I), 481 (II) (1960)
1197 R	Millimicrosecond-Switching Diodes	J. Halpern R. H. Rediker	Electronics <u>32</u> , No. 23, 66 (1959)
1198 R	Maximum Angular Accuracy of Tracking a Radio Star by Lobe Comparison	R. Manasse	Trans. IRE, PGAP <u>AP-8</u> , 50 (1960)
1200	Versatile and Sensitive Vibrating- Sample Magnetometer	S. Foner	Rev. Sci. Instr. <u>30</u> , 548 (1959)
1201	The Representation of Signals	R. M. Lerner	Trans. IRE, PGCT <u>CT-6</u> , 197 (1959); Trans. IRE, PGIT <u>IT-5</u> , 197 (1959)
1209 R	Transistorized Generator for Pulse Circuit Design	L. Neumann	Electronics <u>32</u> , No. 14, 47 (1959)
1210	The Magnetic Properties of Thin Films	J. B. Goodenough D. O. Smith	Am. Soc. Metals Seminar Volume, Chap. 7 (1959)
1211 R	Polynomial Codes Over Certain Finite Fields	I. S. Reed G. Solomon	J. Soc. Ind. Appl. Math. <u>8</u> , 300 (1960)
1216	Fine Structure in the Zeeman Effect of Excitons in Germanium	K. J. Button L. M. Roth W. H. Kleiner S. Zwerdling B. Lax	Phys. Rev. Letters <u>2</u> , 161 (1959)
1218	The Cryosar - A New Low- Temperature Computer Component	A. L. McWhorter R. H. Rediker	Proc. IRE <u>47</u> , 1207 (1959)
1226	The Pursuit of a Language for Expressing the Outward Behavior of Information Processing Systems	P. R. Bagley	Commun. ACM <u>2</u> , 1 (1959)
1229 R	The Velocity of Sound in Liquid Helium Near the λ -Point	C. E. Chase	Phys. Rev. Letters <u>2</u> , 197 (1959)
1240 R	Note on a Singular Function of Minkowski	J. R. Kinney	Proc. Am. Math. Soc. <u>11</u> , 788 (1960)
1241	Measurement of Switching Transistor Parameters	R. C. Johnston R. L. Burke	Semiconductor Prod. <u>3</u> , No. 2, 43 (1960)
1242 R	Automatic Phase Control: Theory and Design	T. J. Rey	Proc. IRE <u>48</u> , 1760 (1960)

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1243 R	Radar Echoes from Venus	R. Price T. J. Goblick P. E. Green, Jr. R. H. Kingston L. G. Kraft G. H. Pettengill R. Silver W. B. Smith	Science <u>129</u> , 751 (1959)
1247	On the Use of Laguerre Polynomials in Treating the Envelope and Phase Components of Narrow-Band Gaussian Noise	I. S. Reed	Trans. IRE, PGIT <u>IT-5</u> , 102 (1959)
1249 R	LCAO Wave Functions for Hydrogen Fluoride with Hartree-Fock Atomic Orbitals	A. M. Karo L. C. Allen §	J. Chem. Phys. <u>31</u> , 968 (1959)
1253 R	Means for Counting "Effective" Numbers of Objects or Durations of Signals	R. M. Lerner	Proc. IRE (Correspondence) <u>47</u> , 1653 (1959)
1254 R	Boundary Behavior of Blaschke Products in the Unit Circle	J. R. Kinney	Proc. Am. Math. Soc. <u>12</u> , 484 (1961)
1263 R	Application of Statistical Notions to Multipath Channels	P. E. Green, Jr.	Nuovo Cimento <u>13</u> , 406 (1959)
1264 R	Results Obtained from a Vowel Recognition Computer Program	J. W. Forgie C. D. Forgie	J. Acoust. Soc. Am. <u>31</u> , 1480 (1959)
1265 R	Surface-Dependent Losses in Variable Reactance Diodes	D. E. Sawyer	J. Appl. Phys. <u>30</u> , 1689 (1959)
1266 R	The Spectrochemical Analysis of High Purity Gallium	E. B. Owens	Appl. Spectroscopy <u>13</u> , 105 (1959)
1267 R	The Size Effect of Ferrite Spheres	W. Hauser L. T. Brown	Quart. J. Mech. Appl. Math. <u>13</u> , 257 (1960)
1269A R	Galvanomagnetic Effects in n-Type Silicon	W. E. Krag	Phys. Rev. <u>118</u> , 435 (1960)
1276	State of the Millimeter Wave Art	B. Lax G. S. Heller	Microwave J. <u>2</u> , No. 5, 12 (1959)
1281 R	Deformation Potential in Germanium from Optical Absorption Lines for Exciton Formation	W. H. Kleiner L. M. Roth	Phys. Rev. Letters <u>2</u> , 334 (1959)
1284	Non-Computational Uses of Digital Computers	B. F. Green, Jr.	Behavioral Sci. <u>4</u> , 164 (1959)
1288 R	Thin Magnetic Films for Digital Computer Memories	D. O. Smith	Electronics <u>32</u> , No. 26, 44 (1959)

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1290 R	Suggestion Concerning Magnetic Interactions in Spinel	D. G. Wickham J. B. Goodenough	Phys. Rev. <u>115</u> , 1156 (1959)
1293 R	The Remarkable "Maser" Story	B. Lax H. C. Gatos	Tech. Rev. <u>61</u> , 36 (1959)
1298 R	Spin Waves	P. E. Tannenwald	Microwave J. <u>2</u> , No. 7, 25 (1959)
1302 R	Theory of Electrical Conduction in High Magnetic Fields	P. N. Argyres L. M. Roth	J. Phys. Chem. Solids <u>12</u> , 89 (1959)
1307A	Quantizing for Minimum Distortion	J. Max	Trans. IRE, PGIT <u>IT-6</u> , 7 (1960)
1313A R	Effects of Solar Radiation Pressure on Earth Satellite Orbits	R. W. Parkinson § H. M. Jones I. I. Shapiro	Science <u>134</u> , 920 (1960)
1318	The Effect of a Heat Current or Rotation on Sound Propagation in Liquid Helium	C. E. Chase J. Fineman W. E. Millett §	Physica <u>25</u> , 631 (1959)
1321	The Solid State Maser	R. H. Kingston	Engineers' News Supplement, N. Y. Herald Tribune, 24 May 1959
1336 R	Proposal for a Feasible Programming System	P. R. Bagley	Commun. ACM <u>2</u> , 7 (1959)
1338	Optical Absorption of CoO and MnO Above and Below the Néel Temperature	G. W. Pratt, Jr. R. Coelho §	Phys. Rev. <u>116</u> , 281 (1959)
1340 R	Perturbation of Wave Guides and Cavities by Spheres and Cylinders	W. Hauser L. T. Brown	J. Appl. Phys. <u>30</u> , 1460 (1959)
1348	Multilevel Pulsed Field Maser for Generation of High Frequencies	S. Foner L. R. Momo A. Mayer	Phys. Rev. Letters <u>3</u> , 36 (1959)
1354 R	High Magnetic Fields for Advanced Research	H. H. Kolm	Electronics <u>32</u> , No. 40, 43 (1959)
1356A R	Performance of a 640-Mile, 24-Channel UHF-SSB Experimental Communication System	B. E. Nichols	Trans. IRE, PGCS <u>CS-8</u> , 26 (1960)
1357	Quantum Theory of Transport in a Magnetic Field	P. N. Argyres	Phys. Rev. <u>117</u> , 315 (1960)
1359	Cd_3As_2 - A Non-Cubic Semiconductor with Unusually High Electron Mobility	A. J. Rosenberg T. C. Harman	J. Appl. Phys. <u>30</u> , 1621 (1959)

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1367 R	The Reaction of Germanium with Aqueous Solutions. II. Dissolution Kinetics in Electrolytes and the Role of Specific Adsorption	W. W. Harvey H. C. Gatos	J. Electrochem. Soc. <u>107</u> , 65 (1960)
1369	Effects of UHF Radiation on Animals	M. Lubin § L. E. Bird G. W. Curtis § P. F. Daley D. G. Cogan § H. R. Dudley § S. J. Fricker	AMA Arch. Ind. Health <u>21</u> , 558 (1960)
1371 R	Gallium-Arsenide Diffused Diodes	J. Lowen R. H. Rediker	J. Electrochem. Soc. <u>107</u> , 26 (1960)
1372 R	A Review of Panel-Type Display Devices	J. J. Josephs	Proc. IRE <u>48</u> , 1380 (1960)
1373 R	Classical Spin-Configuration Stability in the Presence of Competing Exchange Forces	T. A. Kaplan	Phys. Rev. Letters <u>116</u> , 888 (1959)
1374 R	Remembering the Present States of a Number of Variables	D. B. Yntema G. E. Mueser	J. Exptl. Psychol. <u>60</u> , 18 (1960)
1376 R	Simple Null-Indicating Saturable-Core Magnetometer for the Detection of Static Magnetic Fields	E. P. McCurley C. Blake	Rev. Sci. Instr. <u>31</u> , 440 (1960)
1377 R	The Growth of Anodic Oxide Films on Germanium	S. Zwerdling S. Sheff	J. Electrochem. Soc. <u>107</u> , 338 (1960)
1378	IPL-V: The Newell-Shaw-Simon Programming Language	B. F. Green, Jr.	Behavioral Sci. <u>5</u> , 94 (1960)
1379 R	Electroforming of Intricate Electronic Components	E. B. Murphy	Electronics <u>32</u> , No. 37, 114 (1959)
1381	On a System of Integrodifferential Equations Occurring in Reactor Dynamics	J. J. Levin J. A. Nohel §	J. Math. and Mech. <u>9</u> , 347 (1960)
1382 R	Transistor-Capacitor Shift Register	R. W. Hofheimer	Semiconductor Prod. <u>3</u> , No. 7, 31 (1960)
1383 R	Mutual Coupling Effects in Large Antenna Arrays. I. Slot Arrays	S. Edelberg A. A. Oliner §	Trans. IRE, PGAP <u>AP-8</u> , 286 (1960)
1388 R	Computation and Measurement of the Fading Rate of Moon-Reflected UHF Signals	S. J. Fricker R. P. Ingalls W. C. Mason M. L. Stone D. W. Swift	J. Research Natl. Bur. Standards <u>64D</u> , 455 (1960)

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1393 R	Circulators at 70 and 140 kMeps	J. B. Thaxter G. S. Heller	Proc. IRE <u>48</u> , 110 (1960)
1396A	Characteristics of the {111} Surfaces of the III-V Intermetallic Compounds	H. C. Gatos M. C. Lavine	J. Electrochem. Soc. <u>107</u> , 427 (1960)
1397 R	Delay-Line Specifications for Matched-Filter Communications Systems	R. M. Lerner B. Reiffen H. Sherman	Trans. IRE, PGCP <u>CP-6</u> , 263 (1959)
1398	The MIT Whirlwind 1 Computer	J. A. Kessler R. Eldridge	Naval Research Reviews (October 1959)
1399 R	Accuracy in Reconstructing the Arrangement of Elements Generating Kinetic Depth Displays	B. W. White G. E. Mueser	J. Exptl. Psychol. <u>60</u> , 1 (1960)
1400 R	In Defense of the Bat	J. Freedman	Contemp. Psychol. <u>4</u> , 372 (1959)
1409	Material for Microwaves	B. Lax	Microwave J. <u>2</u> , 9 (1959)
1410 R	g Factor of Electrons in Germanium	L. M. Roth B. Lax	Phys. Rev. Letters <u>3</u> , 217 (1959)
1415 R	Note on the Distribution of Locally Maximal Elements in a Random Sample	M. Freimer B. Gold	Ann. Math. Stat. <u>31</u> , 518 (1960)
1420 R	Mutual Coupling Effects in Large Antenna Arrays. II. Compensation Effects	S. Edelberg A. A. Oliner §	Trans. IRE, PGAP <u>AP-8</u> , 360 (1960)
1426A R	Classical Theory of Spin Configurations in the Cubic Spinel	T. A. Kaplan	Phys. Rev. <u>119</u> , 1460 (1960)
1428	Growth of InSb Crystals in the Polar Direction	H. C. Gatos P. L. Moody M. C. Lavine	J. Appl. Phys. <u>31</u> , 212 (1960)
1431	Magneto-Optical Phenomena in Semiconductors	B. Lax S. Zwerdling	Prog. in Semiconductors <u>5</u> , 223 (1960)
1440	Pulsed Field Millimeter Wave Maser	L. R. Momo R. A. Myers § S. Foner	J. Appl. Phys. <u>31</u> , 443 (1960)
1443 R	Light-Pen Links Computer to Operator	B. M. Gurley C. E. Woodward	Electronics <u>32</u> , No. 47, 85 (1959)
1447 R	Direct Cation- -Cation Interactions in Several Oxides	J. B. Goodenough	Phys. Rev. <u>117</u> , 1442 (1960)

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1448 R	Observed Characteristics of an Ultra-High-Frequency Signal Traversing an Auroral Disturbance	J. C. James L. E. Bird R. P. Ingalls M. L. Stone J. W. B. Day G. E. K. Lockwood § R. I. Presnell §	Nature <u>185</u> , 510 (1960)
1454 R	The Preparation and Crystallography of FeNiN and the Series $Fe_{4-x}Ni_xN$	R. J. Arnott A. Wold	J. Phys. Chem. Solids <u>15</u> , 152 (1960)
1455	Dislocation Etch Pits on the {111} and {111} Surfaces of InSb	H. C. Gatos M. C. Lavine	J. Appl. Phys. <u>31</u> , 743 (1960)
1456 R	Studies in Partial Switching of Ferrite Cores	R. H. Tancell R. E. McMahon	J. Appl. Phys. <u>31</u> , 762 (1960)
1457 R	Kinetics of the Oxidation of Antimony	A. J. Rosenberg A. A. Menna T. P. Turnbull	J. Electrochem. Soc. <u>107</u> , 196 (1960)
1461	Cell for the Infrared Spectroscopy of Solid and Gas-Solid Phase Reactions	F. Vratny § B. Gravcs §	Rev. Sci. Instr. <u>31</u> , 65 (1960)
1462 R	The Preparation of Stoichiometric Ferrites	D. G. Wickham E. R. Whipple E. G. Larson	J. Inorg. Nucl. Chem. <u>14</u> , 217 (1960)
1466	Etching Behavior of the {110} and {100} Surfaces of InSb	H. C. Gatos M. C. Lavine	J. Electrochem. Soc. <u>107</u> , 433 (1960)
1467	Review of "Paris Symposium on Radio Astronomy"	R. H. Kingston	Microwave J. <u>3</u> , No. 2, 76 (1960)
1475 R	Effect of the Lattice on Dielectric Properties of an Electron Gas	D. S. Falk	Phys. Rev. <u>118</u> , 105 (1960)
1477	Superconducting Electromagnets	S. H. Autler	Rev. Sci. Instr. <u>31</u> , 369 (1960)
1484	An IF Power Comparator With Large Dynamic Range	G. R. Curry	Proc. IRE (Correspondence) <u>48</u> , 1490 (1960)
1485	Paraboloidal Reflector Patterns for Off-Axis Feed	S. S. Sandler	Trans. IRE, PGAP <u>AP-8</u> , 368 (1960)
1489 R	On Decoding Linear Error-Correcting Codes. I.	N. Zierler	Trans. IRE, PGIT <u>IT-6</u> , 450 (1960)
1490 R	Magnetoplasma Reflection in Solids	B. Lax G. B. Wright	Phys. Rev. Letters <u>4</u> , 16 (1960)

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1493	Digital Computer Techniques in the Study of the Nervous System	W. A. Clark	The Reflector <u>8</u> , 25 (1959)
1494	Indium as a Source of Impurities in Indium Arsenide	A. J. Strauss T. C. Harman E. B. Owens M. C. Finn	Solid-State Electron. <u>1</u> , 131 (1960)
1495 R	Historical Sketch of Ferrites and Their Microwave Applications	K. J. Button	Microwave J. <u>3</u> , No. 3, 73 (1960)
1497 R	Generalization of Band Theory to Include Self-Energy Corrections	G. W. Pratt, Jr.	Phys. Rev. <u>118</u> , 462 (1960)
1501 R	Global Asymptotic Stability for Nonlinear Systems of Differential Equations and Applications to Reactor Dynamics	J. J. Levin J. A. Nohel §	Arch. Rat. Mech. Anal. <u>5</u> , 494 (1960)
1502A R	Preparation and Properties of CdSnAs ₂	A. J. Strauss A. J. Rosenberg	J. Phys. Chem. Solids <u>17</u> , 278 (1961)
1504	Cyclotron Resonance	B. Lax J. G. Mavroides	Solid-State Phys. <u>11</u> , 261 (1960)
1506A	Concerning Hybrids	C. W. Jones	Microwave J. <u>4</u> , No. 10, 98 (1961)
1510	Etching and Inhibition of the {111} Surfaces of the III-V Intermetallic Compounds: InSb	H. C. Gatos M. C. Lavine	J. Phys. Chem. Solids <u>14</u> , 169 (1960)
1511 R	Length of Series and the Learning Curve	N. C. Waugh	Am. J. Psychol. <u>75</u> , 177 (1962)
1514 R	Background to Scientific Communication	M. M. Kessler	Trans. IRE, PGEWS <u>EWS-3</u> , 3 (1960)
1515	Millimeter Cyclotron Resonance in Silicon	C. J. Rauch J. J. Stickler H. J. Zeiger G. S. Heller	Phys. Rev. Letters <u>4</u> , 64 (1960)
1516 R	Zeeman Effect of Impurity Levels in Silicon	S. Zwerdling K. J. Button B. Lax	Phys. Rev. <u>118</u> , 975 (1960)
1517 R	The Effect of a Density Maximum Near the λ Point on the Temperature Distribution in Liquid Helium I	C. E. Chase E. Maxwell W. M. Whitney §	Physica <u>26</u> , 160 (1960)
1520	Physical Adsorption Processes and Their Relation to Order-Disorder Theory	J. M. Honig	Trans. N. Y. Acad. Sci. <u>22</u> , 313 (1960)

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1521	Internal Impurity Levels in Semiconductors: Experiments in p -Type Silicon	S. Zwerdling K. J. Button B. Lax	Phys. Rev. Letters <u>4</u> , 173 (1960)
1522 R	Magnetization Reversal and Asymmetry in Cobalt Vanadate (IV)	N. Menyuk K. Dwight D. G. Wickham	Phys. Rev. Letters <u>4</u> , 119 (1960)
1524 R	CW Millimeter Wave Maser Using Fe^{3+} in TiO_2	S. Foner L. R. Momo	J. Appl. Phys. <u>31</u> , 742 (1960)
1525 R	Radiochemical Evaluation of Solvent Extraction of Indium as the Bromide at High Concentrations	E. B. Owens	Anal. Chem. <u>32</u> , 1366 (1960)
1528 R	A Note on Human Recognition of Hand-Printed Characters	U. Neisser P. Weene	Inform. and Control <u>3</u> , 191 (1960)
1534 R	The Oxidation of Intermetallic Compounds. I. High Temperature Oxidation of InSb	A. J. Rosenberg M. C. Lavine	J. Phys. Chem. <u>64</u> , 1135 (1960)
1535 R	Oxidation of Intermetallic Compounds. II. Interrupted Oxidation of InSb	A. J. Rosenberg	J. Phys. Chem. <u>64</u> , 1143 (1960)
1536	Metallurgy and Semiconductor Materials	H. C. Gatos, Editor	<u>Properties of Elemental and Compound Semiconductors</u> , AIME Publications (Interscience Publishers, New York, 1960)
1537 R	Experimental Comparison of Equal-Gain Maximal-Ratio Diversity Combiners	R. V. Locke, Jr.	Proc. IRE (Correspondence) <u>48</u> , 1488 (1960)
1538	Conference on Quantum Electronics	B. Lax	Microwave J. <u>3</u> , No. 2, 21 (1960)
1542 R	Determination of the Effective Scattering Mechanism Parameter of Electron Transport Theory	T. C. Harman	Phys. Rev. <u>118</u> , 1541 (1960)
1545 R	Charging Curves for Germanium Electrodes	W. W. Harvey S. Sheff H. C. Gatos	J. Electrochem. Soc. <u>107</u> , 560 (1960)
1546A R	Derivation of the Boltzmann Transport Equation for Inelastic Collisions	P. N. Argyres	J. Phys. Chem. Solids <u>19</u> , 66 (1961)
1547 R	g Factor and Donor Spin-Lattice Relaxation for Electrons in Germanium and Silicon	L. M. Roth	Phys. Rev. <u>118</u> , 1534 (1960)

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1549	Magneto-Plasma Reflection in n-Type InSb and n-Type HgSe	G. B. Wright B. Lax	Phys. Rev. Letters <u>4</u> , 16 (1960)
1555 R	First Passage Times of a Generalized Random Walk	J. R. Kinney	Ann. Math. Stat. <u>32</u> , 235 (1961)
1556	New Tools for Research	B. Lax	Microwave J. <u>3</u> , No. 6, 19 (1960)
1558 R	Evidence for the Quantization of Circulation in Liquid Helium II	C. E. Chase	Phys. Rev. Letters <u>4</u> , 220 (1960)
1560 R	Physical Adsorption Processes and Their Relation to Order-Disorder Theory	J. M. Honig	Trans. N. Y. Acad. Sci. <u>22</u> , 313 (1960)
1561 R	A Matched Filter Detection System for Complicated Doppler Signals	R. M. Lerner	Trans. IRE, PGIT <u>IT-6</u> , 373 (1960)
1563 R	Measurements of Lunar Reflectivity Using the Millstone Radar	G. H. Pettengill	Proc. IRE (Correspondence) <u>48</u> , 933 (1960)
1565A R	Semiconductor Compounds	H. C. Gatos	Nucleus <u>37</u> , 165 (1960)
1567 R	Separation of the Defect Concentration and Diffusion Coefficient in Diffusion-Limited Scaling Reactions	A. J. Rosenberg	J. Electrochem. Soc. <u>107</u> , 795 (1960)
1570 R	Magnetic Properties of Mn_3O_4 and the Canted Spin Problem	K. Dwight N. Menyuk	Phys. Rev. <u>119</u> , 1470 (1960)
1573	Magnetic Properties of Perovskites	J. B. Goodenough	<u>Landolt-Bornstein Tabellen</u> , Vol. II/9 (Springer-Verlag, Berlin, 1962)
1577	Electromagnet Design	H. H. Kolm D. B. Montgomery	<u>Encyclopedic Dictionary of Physics</u> (Pergamon Press, London, 1961)
1578A R	On the Global Asymptotic Behavior of Nonlinear Systems of Differential Equations	J. J. Levin	Arch. Ra. Mech. Anal. <u>6</u> , 65 (1960)
1579	Measurements of the Spectrum of Radio Noise from 50–100 cps	M. Balser C. A. Wagner	J. Research Natl. Bur. Standards <u>64D</u> , 415 (1960)
1581A R	Improved Square Wave Inductance Bridge	B. Howland	Rev. Sci. Instr. <u>31</u> , 763 (1960)
1582 R	Optimum Approximation to a Matched Filter Response	J. W. Craig, Jr.	Trans. IRE, PGIT <u>IT-6</u> , 409 (1960)
1587	A Solid-State UHF Radar Transponder	L. Cartledge G. B. Tiffany §	Astronautics <u>5</u> , 30 (1960)

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1589	C-W Cell Decompositions of Symmetric Homogeneous Spaces	R. Hermann	Bull. Am. Math. Soc. <u>66</u> , 126 (1960)
1590	On Geodesics That Are Also Orbits	R. Hermann	Bull. Am. Math. Soc. <u>66</u> , 91 (1960)
1590A R	Geodesics of Bounded, Symmetric Domains	R. Hermann	Comment. Math. Helvetici <u>35</u> , 1 (1961)
1591 R	On the Differential Geometry of Foliations	R. Hermann	Ann. Math. <u>72</u> , 445 (1960)
1592 R	Remarks on the Foundations of Integral Geometry	R. Hermann	Rendic. Circolo Mat. (Palermo) <u>9</u> , 1 (1960)
1593 R	Ionospheric Backscatter Observation at 440 Mcps	V. C. Pineo L. G. Kraft H. W. Briscoe	J. Geophys. Res. <u>65</u> , 1620 (1960)
1594 R	Activity Coefficients of Electrons and Holes at High Concentrations	A. J. Rosenberg	J. Chem. Phys. <u>33</u> , 665 (1960)
1597 R	Radar Echoes from Venus and a New Determination of the Solar Parallax	G. H. Pettengill R. Price	Planet. Space Sci. <u>5</u> , 70 (1961)
1599	Inclusion Theory of Kerston	N. Menyuk	<u>Encyclopedic Dictionary of Physics</u> (Pergamon Press, London, 1961)
1600	Spontaneous Magnetization	K. Dwight	<u>Encyclopedic Dictionary of Physics</u> (Pergamon Press, London, 1961)
1601	The Reaction of Semiconductors With Aqueous Solutions	H. C. Gatos, Editor	<u>The Surface Chemistry of Metals and Semiconductors</u> (Wiley, New York, 1960)
1602 R	On the Theory of Indicator-Dilution Methods Under Varying Blood-Flow Conditions	H. Sherman	Bull. Math. Biophys. <u>22</u> , 417 (1960)
1603A	An Infinite-Stage Production-Smoothing Process	M. Freimer	J. Math. Anal. Appl. <u>2</u> , 500 (1961)
1605 R	{111} Direct Transition Exciton and Magnetoreflection in Germanium	B. Lax	Phys. Rev. Letters <u>4</u> , 511 (1960)
1607 R	Damaged Layers and Crystalline Perfection in the {111} Surfaces of III-V Intermetallic Compounds	E. P. Warekois M. C. Lavine H. C. Gatos	J. Appl. Phys. <u>31</u> , 1302 (1960)

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1610 R	On Singular and Nonsingular Optimum (Bayes) Tests for the Detection of Normal Stochastic Signals in Normal Noise	D. Middleton	Trans. IRE, PGIT <u>IT-7</u> , 105 (1961)
1612	Review of "Alpha-Numeric Character Recognition Using Local Operations," by J. S. Bomba	H. Sherman	Trans. IRE, PGEC <u>EC-9</u> , 382 (1960)
1613	Review of "Pattern Recognition and Reading by Machine," by W. W. Bledsoe and I. Browning	H. Sherman	Trans. IRE, PGEC <u>EC-9</u> , 384 (1960)
1614 R	Growth of GaAs Crystals in the <111> Polar Direction	P. L. Moody H. C. Gatos M. C. Lavine	J. Appl. Phys. <u>31</u> , 1696 (1960)
1615 R	A Representation of Vector-Valued Random Processes	E. J. Kelley, Jr. W. L. Root	J. Math. and Phys. <u>39</u> , 211 (1960)
1616A	First Aid for a Giant Bearing	D. A. Regillo	Am. Machinist <u>105</u> , 146 (1964)
1619 R	Pattern Recognition by Machine	O. G. Selfridge U. Neisser	Scientific American, 2 (August 1960)
1620 R	Oblique-Incidence Anisotropy in Evaporated Permalloy Films	D. O. Smith M. S. Cohen G. P. Weiss	J. Appl. Phys. <u>31</u> , 1755 (1960)
1622 R	Note on the Equalization and Cancellation Theory of Binaural Masking Level Differences	N. I. Durlach	J. Acoust. Soc. Am. <u>32</u> , 1075 (1960)
1625 R	Exploring the Solar System by Radar	P. E. Green, Jr. G. H. Pettengill	Sky and Telescope <u>20</u> , 3 (1960)
1626	Two-Error Correcting Bose-Chaudhuri Codes are Quasi-Perfect	N. Zierler D. Gorenstein § W. W. Peterson §	Inform. and Control <u>3</u> , 294 (1960)
1627 R	A Possible Long-Range Communications Link Between Ground and Low-Orbiting Satellites	M. S. Maerakis	J. Atmos. Terr. Phys. <u>19</u> , 260 (1960)
1628	Band Structure of Transition Metals and Their Alloys	J. B. Goodenough	Phys. Rev. <u>120</u> , 67 (1960)
1629 R	Magneto-Tunneling in InSb	A. R. Calawa R. H. Rediker B. Lax A. L. McWhorter	Phys. Rev. Letters <u>5</u> , 55 (1960)
1631 R	Method for Determining Ground-State Spin Configurations	D. H. Lyons T. A. Kaplan	Phys. Rev. <u>120</u> , 1580 (1960)

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1634	Rotating Polarization and Periodic Bodies	J. J. Mikulski	Proc. IRE <u>49</u> , 361 (1961)
1636 R	Thermal Conduction in Rotating Liquid Helium II	C. E. Chase	Phys. Rev. <u>120</u> , 688 (1960)
1637 R	A Stochastic Model for Free Recall	N. C. Waugh J. E. K. Smith	Psychometrika <u>27</u> , 151 (1962)
1638 R	Low Temperature Paramagnetic Resonance of Trapped O ₂	S. Foner H. Meyer § W. H. Kleiner	J. Phys. Chem. Solids <u>18</u> , 273 (1961)
1640 R	The Average Response Computer (ARC); A Digital Device for Computing Averages and Amplitude and Time Histograms of Electrophysiological Response	W. A. Clark, Jr. R. M. Brown M. H. Goldstein C. E. Molnar D. F. O'Brien H. E. Zieman	Trans. IRE, PGBME <u>BME-8</u> , 46 (1961)
1642 R	Low Reverse Leakage Gallium-Arsenide Diodes	J. Halpern R. H. Rediker	Proc. IRE (Correspondence) <u>48</u> , 1780 (1960)
1643 R	Electromagnetic Properties of Ferrimagnetics and Their Applications from UHF to Millimeter Waves. I, II, III	B. Lax K. J. Button	Microwave J. <u>3</u> , No. 9, 2; No. 10, 52; No. 11, 49 (1960)
1644 R	Figure Coherence in the Kinetic Depth Effect	B. F. Green, Jr.	J. Exptl. Psychol. <u>62</u> , 272 (1961)
1645 R	Computer Design of Multiple-Output Logical Networks	T. C. Bartee	Trans. IRE, PGEC <u>EC-10</u> , 24 (1961)
1646 R	General Spin-Wave Dispersion Relations	R. F. Soohoo	Phys. Rev. <u>120</u> , 1978 (1960)
1647 R	Observations of Earth-Ionosphere Cavity Resonances	M. Balser C. A. Wagner	Nature <u>188</u> , 638 (1960)
1648 R	Pulsed Field Measurements of Large Zero-Field Splittings: V ³⁺ in Al ₂ O ₃	S. Foner W. Low §	Phys. Rev. <u>120</u> , 1585 (1960)
1650A R	Band-Pass Measurements of a Lunar Reflection Circuit	R. P. Ingalls L. E. Bird J. W. B. Day	Proc. IRE (Correspondence) <u>49</u> , 631 (1961)
1652	The Traveling Wave Resonator and High Power Microwave Testing	S. J. Miller	Microwave J. <u>3</u> , No. 9, 50 (1960)
1653	Review of "A Tunnel Diode Tenth Microsecond Memory," by M. M. Kaufman	R. E. McMahon	Trans. IRE, PGEC <u>EC-9</u> , 527 (1960)

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1654	Review of "Use of a Computer to Design Character Recognition Logic," by R. J. Evey	W. Doyle	Trans. IRE, PGEC <u>EC-9</u> , 522 (1960)
1655	Frequency Variations Due to Over-the-Horizon Tropospheric Propagation	J. H. Chisholm S. J. Goodman § J. M. Kennedy § L. B. Lambert § L. P. Rainville J. F. Roche	Trans. IRE, PGAP <u>AP-9</u> , 384 (1964)
1657	Review of "Encoding of Incompletely Specified Boolean Matrices," by T. A. Dolotta and E. J. McClusky, Jr.	L. L. Lebow T. C. Bartee	Trans. IRE, PGEC <u>EC-9</u> , 517 (1960)
1658	RF Hall Effect in a Superconductor	G. F. Dresselhaus M. S. Dresselhaus	Phys. Rev. <u>120</u> , 1971 (1960)
1659	Magnetic Film Memory Design	J. I. Raffel T. S. Crowther A. H. Anderson T. O. Herndon	Proc. IRE <u>49</u> , 155 (1961)
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1661	Interband Magnetoreflection in Bismuth. II. Low Fields	R. N. Brown J. G. Mavroides M. S. Dresselhaus B. Lax	Phys. Rev. Letters <u>5</u> , 243 (1960)
1662	Systems Applications of Solid-State Lasers	J. W. Meyer	Electronics <u>33</u> , No. 45, 58 (1960)
1663	Computer Models for Cognitive Processes	B. F. Green, Jr.	Psychometrika <u>26</u> , 85 (1961)
1664A	Calibration of Prism Spectrometers in the Ultraviolet, Visible, and Near-Infrared Regions	S. Zwerdling J. P. Theriault	Spectrochim. Acta <u>17</u> , 819 (1961)
1665	Design Using Computers	T. C. Bartee	Chap. 6, <u>A Survey of Switching Circuit Theory</u> , E. J. McCluskey and T. C. Bartee, Eds. (McGraw-Hill, New York, 1962)
1667	Free Versus Serial Recall	N. C. Waugh	J. Exptl. Psychol. <u>62</u> , 496 (1961)
1669	Compound Cryosars for Low-Temperature Computer Memories	R. H. Rediker A. L. McWhorter	Solid-State Electron. <u>2</u> , 100 (1961)
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1673 R	Perturbations of the Orbit of the Echo Balloon	I. I. Shapiro H. M. Jones	Science <u>132</u> , 1484 (1960)
1674 R	Solid Solutions of In_2Te_3 in Sb_2Te_3 and Bi_2Te_3	A. J. Rosenberg A. J. Strauss	J. Phys. Chem. Solids <u>19</u> , 105 (1961)
1675 R	Electrical Properties of n-Type GaSb	A. J. Strauss	Phys. Rev. <u>121</u> , 1087 (1961)
1677 R	Exchange Integral in Cobalt from Spin-Wave Resonance	P. E. Tannenwald R. Weber	Phys. Rev. <u>121</u> , 715 (1961)
1678 R	The Induction-Coupled Plasma Torch	T. B. Reed	J. Appl. Phys. <u>32</u> , 821 (1961)
1680 R	Communications Through Unspecified Additive Noise	W. L. Root	Inform. and Control <u>4</u> , 15 (1961)
1681 R	Stimulus Programming in Psychophysics	J. E. K. Smith	Psychometrika <u>26</u> , 27 (1961)
1682 R	A Transient Discrete Time Queue with Finite Storage	J. R. Kinney	Ann. Math. Stat. <u>33</u> , 130 (1962)
1685 R	Measuring <u>Really</u> Large Diameters	C. A. Pappas	Am. Machinist <u>105</u> , 92 (1961)
1687	Error Statistics and Coding for Binary Transmission Over Telephone Circuits	A. B. Fontaine R. G. Gallager	Proc. IRE <u>49</u> , 1059 (1961)
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1691 R	Machine Preparation of Printed-Wiring Masks	E. A. Guditz	Trans. IRE, PGPEP <u>PEP-5</u> , 22 (1961)
1692 R	Cyclotron Resonance in Indium Antimonide at High Magnetic Fields	B. Lax J. G. Mavroides H. J. Zeiger R. J. Keyes	Phys. Rev. <u>122</u> , 31 (1961)
1693 R	A Poisson Kernel for Certain Homogeneous Spaces	R. Hermann	Proc. Am. Math. Soc. <u>12</u> , 892 (1961)
1697 R	Hexagonal Iron Nitrides	A. Wold R. J. Arnott N. Menyuk	J. Phys. Chem. <u>65</u> , 1068 (1961)
1698 R	Interferometer Techniques Applied to Radar	E. Gehrels A. Parsons	Trans. IRE, PGMIL <u>MIL-5</u> , 139 (1961)

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1704 R	Emission Spectrographic Analysis of Fused Aluminum Oxide and Fused Tin Oxide Crystals	E. B. Owens	Appl. Spectroscopy 16, 86 (1962)
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1708 R	Cobalt Ferrite Single Crystals	A. Ferretti R. J. Arnott E. Delaney A. Wold	J. Appl. Phys. 32, 905 (1961)
1709 R	Characteristics of the {111} Surfaces of the III-V Inter- metallic Compounds. II. Sur- face Damage	H. C. Gatos M. C. Lavine E. P. Warekois	J. Electrochem. Soc. 108, 645 (1961)
1710 R	Antimony Edge Dislocations in InSb	H. C. Gatos M. C. Finn M. C. Lavine	J. Appl. Phys. 32, 1174 (1961)
1711 R	The Computer as a Pattern Generator for Perceptual Research	B. W. White	Behavioral Sci. 6, 253 (1961)
1712 R	Hydromagnet: A Self-Generating Liquid Conductor Electromagnet	H. H. Kolm O. K. Mawardi §	J. Appl. Phys. 32, 1296 (1961)
1714 R	Man-Computer Cooperation in Decisions Requiring Common Sense	D. B. Yntema W. S. Torgerson	Trans. IRE, PGHFE HFE-2, 20 (1961)
1716 R	A New Treatment of Bose- Chaudhuri Codes	H. F. Mattson § G. Solomon	J. Soc. Ind. Appl. Math. 9, 654 (1961)
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1719 R	100-200 kMc Water Calorimeter	J. B. Thaxter J. McGowan, III	Rev. Sci. Instr. 32, 605 (1961)

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1720 R	Induction Heated Pressure Vessel for Growing Oxide Single Crystals	A. Ferretti D. G. Wickham A. Wold	Rev. Sci. Instr. <u>32</u> , 566 (1961)
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1722 R	Atmospheric Absorption of 10-400 kMcps Radiation: Summary and Bibliography to 1961	E. S. Rosenblum	Microwave J. <u>4</u> , No. 3, 91 (1961)
1723 R	Evidence for Canted Magnetic Moments in Manganous Stannate (Mn ₂ SnO ₄)	D. G. Wickham N. Menyuk K. Dwight	J. Phys. Chem. Solids <u>20</u> , 316 (1961)
1724 R	Recognition of Patterns in the EEG	B. G. Farley	Computer Techniques in EEG Analysis (Elsevier Publishing Co., Amsterdam, 1961), 49
1725 R	The Differential Geometry of Foliations, II	R. Hermann	J. Math. and Mech. <u>11</u> , 303 (1962)
1726 R	Speech Synthesis With Pre-recorded Syllables and Words	A. N. Stowe D. B. Hampton §	J. Acoust. Soc. Am. <u>33</u> , 810 (1961)
1727 R	Bats That Fish	J. J. G. McCue	Naval Research Reviews, 19 (May 1961)
1728 R	Magnetic Field Dependence of the Superconducting Energy Gap	D. H. Douglass, Jr.	Phys. Rev. Letters <u>6</u> , 346 (1961)
1729 R	A Simple Approximate Expression for Converting Directly from Noise Figures in DB to Noise Temperatures	E. P. McCurley C. Blake	Microwave J. <u>4</u> , No. 4, 79 (1961)
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1733	On Differentials in Function Fields	P. L. Falb O. Zariski §	Am. J. Math. <u>83</u> , 542 (1961)
1735 R	Dangling Bonds in III-V Compounds	H. C. Gatos	J. Appl. Phys. <u>32</u> , 1232 (1961)
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1737 R	Likelihood Ratios for Diffusion Processes With Shifted Mean Values	T. S. Pitcher	Trans. Am. Math. Soc. <u>101</u> , 168 (1961)

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1739 R	Hole Injection During Reduction of Ferricyanide at a Germanium Electrode	W. W. Harvey	J. Phys. Chem. <u>65</u> , 1641 (1961)
1741 R	On the Existence of a Fundamental Domain for Riemannian Transformation Groups	R. Hermann	Proc. Am. Math. Soc. <u>13</u> , 489 (1962)
1744 R	Growth of Refractory Crystals Using the Induction Plasma Torch	T. B. Reed	J. Appl. Phys. <u>32</u> , 2534 (1961)
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1746 R	Symmetry of Configurational Entropy in Lattice Statistics	W. H. Kleiner	J. Chem. Phys. <u>36</u> , 76 (1962)
1748 R	The Scattering Properties of the Lunar Surface at Radio Wave Lengths	J. V. Evans G. H. Pettengill	Chap. 5, The Moon, Meteorites, and Comets (The Solar System, Vol. IV)(Univ. of Chicago Press, 1963)
1749 R	On the Consistency of Quantum Field Theory	R. T. Prosser	Bull. Am. Math. Soc. <u>69</u> , 552 (1963)
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1752 R	Design of Wide-Band Shielded Toroidal RF Transformers	R. S. Berg B. Howland	Rev. Sci. Instr. <u>32</u> , 864 (1961)
1753	Solution of Schrödinger Equation for a Periodic Lattice	L. Eyges	Phys. Rev. <u>123</u> , 1673 (1961)
1757 R	'Erekto Subrack Kit' Adapts to Various Board Sizes	W. F. McBride	Elec. Design News <u>7</u> , 64 (1962)
1758 R	Description of Impurity Ionization in Semiconductors by Chemical Thermodynamics	W. W. Harvey	Phys. Rev. <u>123</u> , 1666 (1961)
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1760 R	The Scale of the Solar System	The Staff, Millstone Radar Observatory	Nature <u>190</u> , 592 (1961)
1763A R	Recognition of Familiar Characters Under an Unfamiliar Transformation	B. W. White	Percept. and Motor Skills <u>15</u> , 107 (1962)

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1769A R	Effect of Temporal Ordering on Visual Recognition	B. W. White	Percept. and Motor Skills <u>15</u> , 75 (1962)
1770 R	Ground-State Properties of Nuclear Matter	R. D. Puff	Ann. Phys. <u>13</u> , 317 (1961)
1771	Utilization of Order-Disorder Theory in Physical Adsorption. II. The Square Lattice	J. M. Honig	Advances in Chemistry Series, No. 33, 239 (1961)
1772 R	Width of the Turbulent Trail Behind a Hypervelocity Sphere	R. E. Slattery W. G. Clay	Phys. Fluids <u>4</u> , 1199 (1961)
1773 R	Some Differential-Geometric Aspects of the Lagrange Variational Problem	R. Hermann	Illinois J. Math. <u>6</u> , 634 (1962)
1775 R	Angular Dependence of Magnetoresistance in HgSe	T. C. Harman	J. Appl. Phys. <u>32</u> , 1800 (1961)
1776 R	Measurement of Mitral Regurgitation by Indicator-Dilution Techniques	W. H. Levison § W. D. Jackson § H. Sherman L. B. McGuire §	Circulation Res. <u>9</u> , 1109 (1961)
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1779 R	Generalized Reed-Muller Codes	E. Weiss	Inform. and Control <u>5</u> , 213 (1962)
1780 R	Cyclotron Resonance	B. Lax	Science <u>134</u> , 1333 (1961)
1781 R	Direct Experimental Measurement of the Magnetic Field Dependence of the Superconducting Energy Gap of Aluminum	D. H. Douglass, Jr.	Phys. Rev. Letters <u>7</u> , 14 (1961)
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1785 R	Magnetotunneling in Lead Telluride	R. H. Rediker A. R. Calawa	J. Appl. Phys. <u>32S</u> , 2189 (1961)
1786 R	The Negative Resistances in Junction Diodes	I. Hefni	Proc. IRE (Correspondence) <u>49</u> , 1427 (1961)
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1790 R	Existence in the Large of Parallelism Homomorphisms	R. Hermann	Trans. Am. Math. Soc. <u>108</u> , 170 (1963)
1791 R	Magnetic Field Dependence of the Superconducting Penetration Depth in Thin Specimens	D. H. Douglass, Jr.	Phys. Rev. <u>124</u> , 735 (1961)
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1794 R	Solid-State Devices Other than Semiconductors	B. Lax J. G. Mavroides	Proc. IRE <u>50</u> , 1011 (1962)
1795 R	Oscillatory Magnetoabsorption in InSb Under High Resolution	S. Zwerdling W. H. Kleiner J. P. Theriault	J. Appl. Phys. <u>32S</u> , 2118 (1961)
1796 R	Noncoherent Switching in Permalloy Films	D. O. Smith K. J. Harte	J. Appl. Phys. <u>33</u> , 1399 (1962)
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1799 R	Proposal for Magnetic Domain-Wall Storage and Logic	D. O. Smith	Trans. IRE, PGEC <u>EC-10</u> , 708 (1961)
1802 R	Tangential Limits of Functions of the Class S_α	J. R. Kinney	Proc. Am. Math. Soc. <u>14</u> , 68 (1963)
1803 R	Compression and Coding	E. Weiss	Trans. IRE, PGIT <u>IT-8</u> , 256 (1962)

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1808 R	Radiation Damage Experiments on PbS Infrared Detectors	R. R. Billups W. L. Gardner	Infrared Phys. <u>1</u> , 199 (1961)
1809 R	Sequential Decoding for Discrete Input Memoryless Channels	B. Reiffen	Trans. IRE, PGIT <u>IT-8</u> , 208 (1962)
1810 R	Effects of the Earth's Magnetic Field on the Orbit of a Charged Satellite	I. I. Shapiro H. M. Jones	J. Geophys. Res. <u>66</u> , 4123 (1961)
1812 R	Electrochemical and Adsorption Measurements on Single Crystals: The Germanium-Iodide Solution System	W. W. Harvey H. J. LaFleur H. C. Gatos	J. Electrochem. Soc. <u>109</u> , 155 (1962)
1813A R	Radiation Effects in CaF ₂ :Sm	J. R. O'Connor H. A. Bostick	J. Appl. Phys. <u>33</u> , 1868 (1962)
1815 R	A Note on a New Class of Codes	G. Solomon	Inform. and Control <u>4</u> , 364 (1961)
1816 R	Classical Theory of the Ground Spin-State in Cubic Spinels	D. H. Lyons T. A. Kaplan K. Dwight N. Menyuk	Phys. Rev. <u>126</u> , 540 (1962)
1817 R	A Versatile Stochastic Model of a Function of Unknown and Time Varying Form	H. J. Kushner	J. Math. Anal. Appl. <u>5</u> , 150 (1962)
1818	Computer Techniques for the Study of Patterns in the Electroencephalogram	B. G. Farley L. S. Frishkopf W. A. Clark, Jr. J. T. Gilmore, Jr.	Trans. IRE, PGBME <u>BME-9</u> 4 (1962)
1819 R	Characteristics of the {III} Surfaces of the III-V Intermetallic Compounds: III The Effects of Surface Active Agents on InSb and the Identification of Antimony Edge Dislocations	M. C. Lavine H. C. Gatos M. C. Finn	J. Electrochem. Soc. <u>108</u> , 974 (1961)
1820 R	Interband Transitions for Metals in a Magnetic Field	M. S. Dresselhaus G. F. Dresselhaus	Phys. Rev. <u>125</u> , 499 (1962)
1821	Microwave Devices	K. J. Button	Chap. 25, <u>Magnetism: a Treatise on Modern Theory and Materials</u> , H. Suhl and G. T. Rado, Eds. (Academic Press, New York, 1963)
1822 R	Visual Acuity under Blue Illumination	R. T. Mitchell R. R. Mitchell	Trans. IRE, PGHFE <u>HFE-3</u> , 14 (1962)

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1825 R	Eyes and Ears for Computers	E. E. David, Jr. § O. G. Selfridge	Proc. IRE <u>50</u> , 1093 (1962)
1826	Magnetism and Crystal Structure in Nonmetals	J. B. Goodenough	Chap. 9, <u>Magnetism: a Treatise on Modern Theory and Materials</u> , H. Suhl and G. T. Rado, Eds. (Academic Press, New York, 1963)
1828 R	Nonparabolic Conduction Band in HgSe and $\text{HgSe}_{0.5}\text{Te}_{0.5}$	G. B. Wright A. J. Strauss T. C. Harman	Phys. Rev. <u>125</u> , 1534 (1962)
1830A R	The Multiplicity of Thought	U. Neisser	Brit. J. Psychol. <u>54</u> , 1 (1963)
1831 R	Diurnal Power Variations of the Earth-Ionosphere Cavity Modes and Their Relationship to Worldwide Thunderstorm Activity	M. Balser C. A. Wagner	J. Geophys. Res. <u>67</u> , 619 (1962)
1832A R	A New Technique for Investigation of Meteor Echoes at UHF	G. H. Pettengill	J. Geophys. Res. <u>67</u> , 409 (1962)
1833 R	Theory of Bloch Electrons in a Magnetic Field	L. M. Roth	J. Phys. Chem. Solids <u>23</u> , 433 (1962)
1834	Lifetimes of Orbiting Dipoles	I. I. Shapiro H. M. Jones	Science <u>134</u> , 973 (1961)
1835 R	Mechanical Developer for Mass Spectrographic Plates	E. B. Owens	Rev. Sci. Instr. <u>32</u> , 1420 (1961)
1840 R	Interband Transitions in Superconductors	G. Dresselhaus M. S. Dresselhaus	Phys. Rev. <u>125</u> , 1212 (1962)
1841 R	An RF Multiple Beam-Forming Technique	W. P. Delaney	Trans. IRE, PGMIL <u>MIL-6</u> , 179 (1962)
1841A	Steering Radar Antenna Beams with a Lossless R-F Matrix	W. P. Delaney	Electronics <u>35</u> , No. 28, 50 (1962)
1847 R	Tunnel Diode Burnout from the Video Transient of Gaseous Noise Sources	C. Blake W. C. Ince	Trans. IRE, PGMFT <u>MTT-10</u> 88 (1962)
1848 R	Computer Program for Pitch Extraction	B. Gold	J. Acoust. Soc. Am. <u>34</u> , 916 (1962)
1851 R	Distribution of the Normalized Periodogram Detector	R. P. Wishner	Trans. IRE, PGIT <u>IT-8</u> , 342 (1962)

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1854	Low Electron Effective Masses and Energy Gap in $Cd_xHg_{1-x}Te$	T. C. Harman A. J. Strauss D. H. Dickey M. S. Dresselhaus G. B. Wright J. G. Mavroides	Phys. Rev. Letters <u>7</u> , 403 (1961)
1855	The Effect of Ion Mass and Ion Energy on the Sensitivity of Ilford Q2 Plates as Ion Detectors in Mass Spectrography	E. B. Owens	Appl. Spectroscopy <u>16</u> , 148 (1962)
1856	Sophistication in Computers: a Disagreement	J. R. Kelly, Jr. § O. G. Selfridge	Trans. IRE, PGIT IT-8, 78 (1962) Proc. IRE <u>50</u> , 1459 (1962)
1858	The Great Bat Mystery	J. J. G. McCue	Indust. Photography <u>10</u> , 48 (1961)
1860	Galvano-Thermomagnetic Effects in Degenerate Semiconductors and Semimetals with Nonparabolic Band Shapes: II. General Theory	T. C. Harman J. M. Honig	J. Phys. Chem. Solids <u>23</u> , 913 (1962)
1861	Properties of 400 Mcps Long-Distance Tropospheric Circuits	J. H. Chisholm W. E. Morrow B. E. Nichols J. F. Roche A. E. Teachman §	Proc. IRE <u>50</u> , 2464 (1962)
1862	Bakcable Absolute Pressure Guage for the Millimeter of Mercury Range	W. J. Condeil § H. I. Mandelberg § T. J. Beahn § C. E. Muehc	Rev. Sci. Instr. <u>33</u> , 231 (1962)
1863A	Nb ₃ In: A β -Tungsten Structure Superconducting Compound	M. D. Banus T. B. Reed H. C. Gatos M. C. Lavine J. A. Kafalas	J. Phys. Chem. Solids <u>23</u> , 971 (1962)
1864	{100} Facets in Pulled Crystals of InSb	A. J. Strauss	Solid-State Electron. <u>5</u> , 97 (1962)
1867	Solution of Schrödinger Equation for a Periodic Lattice. II.	L. Egyes	Phys. Rev. <u>126</u> , 93 (1962)
1868	Model for Transient Oscillations in a Three-Level Optical Maser	J. I. Kaplan R. Zicr	J. Appl. Phys. <u>33</u> , 2372 (1962)

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1869 R	The Theory of Tunneling and Its Dependence on a Longitudinal Magnetic Field	P. N. Argyres	Phys. Rev. <u>126</u> , 1386 (1962)
1870	Algebraic Number Theory	E. Weiss	<u>Algebraic Number Theory</u> (McGraw-Hill, New York, 1963)
1872 R	Correlation between Maximum Solid Solubility and Distribution Coefficient for Impurities in Ge and Si	S. Fischler	J. Appl. Phys. <u>33</u> , 1615 (1962)
1873 R	Electrolytic Polarization Resulting from Longitudinal Current in Electrodes	W. W. Harvey	J. Electrochem. Soc. <u>109</u> , 638 (1962)
1874 R	A Figure of Merit for the Design of Inductance Coils Having Low Distributed Capacitance	B. Howland	Trans. IRE, PGCP <u>CP-9</u> , 102 (1962)
1875 R	Computer Applications to Psychological Research: Studies in Perception	B. W. White	Behavioral Sci. <u>7</u> , 396 (1962)
1877 R	Decision Time Without Reaction Time: Experiments in Visual Scanning	U. Neisser	Am. J. Psychol. <u>76</u> , 376 (1963)
1878 R	Small He II Tight Optical Windows	C. J. Rauch W. C. Kernan	Rev. Sci. Instr. <u>33</u> , 496 (1962)
1880B	An Experimental Study of Bibliographical Coupling Between Technical Papers	M. M. Kessler	Trans. IEEE, PTGIT <u>IT-9</u> , 49 (1963)
1881 R	On the Ideal Structure of Operator Algebras	R. T. Prosser	Memoirs Am. Math. Soc., No. 45 (1963)
1882 R	Anomalous Magnetic Films	M. S. Cohen	J. Appl. Phys. <u>33</u> , 2968 (1962)
1884 R	High Magnetic Fields and High Frequencies	B. Lax	Microwave J. <u>5</u> , No. 2, 13 (1962)
1885 R	Adaptation of Lattice Vacancy Theory to Gas Adsorption Phenomena	J. M. Honig C. R. Mueller §	J. Phys. Chem. <u>66</u> , 1305 (1962)
1886 R	Ferro- and Antiferromagnetism in a Cubic Cluster of Spins	G. F. Dresselhaus	Phys. Rev. <u>126</u> , 1664 (1962)
1887 R	Hg-Se System	A. J. Strauss L. B. Farrell	J. Inorg. Nucl. Chem. <u>24</u> , 1211 (1962)
1888 R	Infrared Oscillations from $\text{CaF}_2:\text{U}^{+3}$ and $\text{BaF}_2:\text{U}^{+3}$ Masers	H. A. Bostick J. R. O'Connor	Proc. IRE <u>50</u> , 219 (1962)

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1890 R	Gain and Impedance Variation in Scanned Dipole Arrays	J. L. Allen	Trans. IRE, PGAP AP-10, 566 (1962)
1891 R	Measurement of Turbulent Transition, Motion, Statistics, and Gross Radial Growth behind Hypervelocity Objects	R. E. Slattery W. G. Clay	Phys. Fluids 5, 849 (1962)
1892 R	Array Radars - A Survey of Their Potential and Their Limitations	J. L. Allen	Microwave J. 5, No. 5, 67 (1962)
1893 R	Quantitative Measurement of Semiconductor Homogeneity from Plasma Edge	D. F. Edwards P. D. Maker §	J. Appl. Phys. 33, 2466 (1962)
1894 R	Negative Resistance InSb Diodes with Large Magnetic Field Effects	I. Melngailis R. H. Rediker	J. Appl. Phys. 33, 1892 (1962)
1895 R	Likelihood Ratios for Stochastic Processes Related by Groups of Transformations	T. S. Pitcher	Illinois J. Math. 7, 396 (1963)
1896 R	Hierarchies in Concept Attainment	U. Neisser P. Weene	J. Exptl. Psychol. 64, 640 (1962)
1897A R	Riccati Algebras	J. J. Levin S. S. Shatz	Duke Math. J. 30, 579 (1963)
1898 R	Communication Theory vs Communications	R. M. Lerner	Trans. IRE, PGIT IT-8, 325 (1962)
1901 R	Nonlinear Interband and Plasma Effects in Solids	B. Lax J. G. Mavroides D. F. Edwards	Phys. Rev. Letters 8, 166 (1962)
1903 R	Idler Circuits in Varactor Frequency Multipliers	B. L. Diamond	Trans. IEEE, PTGCT CT-10, 98 (1963)
1904 R	Parametric Amplification and Oscillation at Optical Frequencies	R. H. Kingston	Proc. IRE (Correspondence) 50, 472 (1962)
1905	A Heuristic Program that Solves Symbolic Integration Problems in Freshman Calculus	J. R. Slagle	J. Assoc. Comp. Mach. 10, 507 (1963)
1907 R	An Electron Diffraction Technique for Identifying Oxide Layers on Crystal Surfaces	T. P. Turnbull	Norelco Reporter 9, 77 (1962)
1908 R	Gibbs' Phase Rule and Euler's Formula	J. Mindel	J. Chem. Educ. 39, 512 (1962)
1909 R	Time Optimal Control for Plants with Numerator Dynamics	M. Athanassiades P. L. Falb R. E. Kalman § E. B. Lee §	Trans. IRE, PGAC AC-7, 47 (1962)

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1910 R	Storage and Logic Properties of Magnetic Domain-Walls	D. O. Smith	Solid State Des. <u>3</u> , 23 (1962)	
1913 R	Ferro- and Antiferromagnetism in a Simple Cubic Lattice	G. F. Dresselhaus	Phys. Rev. <u>127</u> , 1137 (1962)	
1914 R	Synthesis and Superconducting Properties of Nb_3Sn_2 and Nb_2Sn_3	T. B. Reed H. C. Gatos	J. Appl. Phys. <u>33</u> , 2657 (1962)	
1915 R	Crystalline Structure and Surface Reactivity	H. C. Gatos	Science <u>137</u> , 311 (1962)	
1916 R	Some Statistical Properties of Pulsed Oblique HF Ionospheric Transmissions	M. Balser W. B. Smith	J. Research Natl. Bur. Standards <u>66D</u> , 721 (1962)	
1917 R	On Frequency Variations of the Earth-Ionosphere Cavity Modes	M. Balser C. A. Wagner	J. Geophys. Res. <u>67</u> , 4081 (1962)	
1919 R	A Radar Investigation of Venus	G. H. Pettengill H. W. Briscoe J. V. Evans E. Gehrels G. M. Hyde L. G. Kraft R. Price W. B. Smith	Astron. J. <u>67</u> , 181 (1962)	
1920 R	Note on the Creation of Pitch through Binaural Interaction	N. I. Durlach	J. Acoust. Soc. Am. <u>34</u> , 1096 (1962)	
1921 R	Thermal Conduction in Liquid Helium II. I. Temperature Dependence	C. E. Chase	Phys. Rev. <u>127</u> , 361 (1962)	
1922	Theory of Galvano-Thermomagnetic Energy Conversion Devices: I. Generators	T. C. Harman J. M. Honig	J. Appl. Phys. <u>33</u> , 3178 (1962)	
1923A R	Optimal Control for Linear Time-Invariant Plants with Time, Fuel and Energy Constraints	M. Athanassiades	Trans. IEEE, Appl. and Indust. <u>82</u> , 8 (1963)	
1924 R	An Alpha-State Finite Automaton for Multiplication by Alpha	J. M. Winett	Trans. IRE, PGEC <u>EC-11</u> , 412 (1962)	
1925 R	Energy of a Vortex Ring in a Tube and Critical Velocities in Liquid Helium II	J. C. Fineman C. E. Chase	Phys. Rev. <u>129</u> , 1 (1963)	
1927 R	Classical Theory of the Ground Spin-State in Normal Tetragonal Spinels. I. Neel, Yafet-Kittel, and Collinear Antiferromagnetic Modes	N. Menyuk K. Dwight D. H. Lyons T. A. Kaplan	Phys. Rev. <u>127</u> , 1983 (1962)	

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1928 R	Quantum Effects in Ge and Si. I.	J. J. Stickler H. J. Zeiger G. S. Heller	Phys. Rev. <u>127</u> , 1077 (1962)
1929 R	Distribution of Sulfur in InSb Single Crystals	M. D. Banus H. C. Gatos	J. Electrochem. Soc. <u>109</u> , 829 (1962)
1933 R	Elastic Strain Energy Associated with the "A" Surfaces of the III-V Compounds	R. E. Hanneman M. C. Finn H. C. Gatos	J. Phys. Chem. Solids <u>23</u> , 1553 (1962)
1935 R	New Method for Calculating Molecular Orbitals with Application to cyclic Systems	L. Egyes	Phys. Rev. <u>128</u> , 1715 (1962)
1937 R	Plasma Torches	T. B. Reed	Intl. Sci. and Tech. No. 6, 42 (1962)
1939 R	Theory of Indirect Exchange Interactions in Rare-Earth Metals	T. A. Kaplan D. H. Lyons	Phys. Rev. <u>129</u> , 2072 (1963)
1941 R	The Well-Rounded Man	B. Lax	Microwave J. <u>5</u> , No. 6, 13 (1962)
1943 R	Growth of Ferrous-Free Cobalt Ferrite Single Crystals	A. Ferretti W. Kunmann A. Wold	J. Appl. Phys. <u>34</u> , 388 (1963)
1944 R	Infrared Absorption Spectrum of Sulfur-Doped Silicon	W. E. Krag H. J. Zeiger	Phys. Rev. Letters <u>8</u> , 485 (1962)
1945 R	Theory of Galvano-Thermomagnetic Energy Conversion Devices: II. Refrigerators and Heat Pumps	T. C. Harman J. M. Honig	J. Appl. Phys. <u>33</u> , 3488 (1962)
1946 R	Transcontinental Satellite Television Transmission	D. H. Hamilton H. H. Hoover R. V. Locke D. C. MacLellan W. E. Morrow B. E. Nichols T. F. Rogers P. Waldron	Proc. IRE (Correspondence) <u>50</u> , 1522 (1962)
1947	Methods for the Adaptive Optimization of Binary Detection Systems	H. J. Kushner	Accepted Trans. IEEE, PTGIT
1948 R	A Note on Threshold Device Error Analysis	P. E. Wood, Jr.	Trans. IEEE, PTGEC <u>EC-12</u> , 403 (1963)
1949	Recombination Radiation Emitted by Gallium Arsenide	R. J. Keyes T. M. Quist	Proc. IRE (Correspondence) <u>50</u> , 1822 (1962)
1950 R	The Asymptotic Behavior of the Solution of a Volterra Equation	J. J. Levin	Proc. Am. Math. Soc. <u>14</u> , 534 (1963)

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1952 R	On the Effect of Mutual Coupling on Unequally Spaced Dipole Arrays	J. L. Allen W. P. Delaney	Trans. IRE, PGAP <u>AP-10</u> , 784 (1962)
1954 R	Preparation of Niobium-Tin Wires for Microscopy	T. P. Turnbull H. H. Ehlers	Rev. Sci. Instr. <u>33</u> , 876 (1962)
1957 R	Deviations from Stoichiometry and Electrical Properties in SnTe	R. F. Brebrick	J. Phys. Chem. Solids <u>24</u> , 27 (1963)
1958 R	A Circuit for the Square Root of the Sum of the Squares	T. E. Stern § R. M. Lerner	Proc. IEEE <u>51</u> , 593 (1963)
1959 R	The Computation of Electromagnetic Scattering from Concentric Spherical Structures	J. J. Mikulski E. L. Murphy	Trans. IEEE, PTGAP <u>AP-11</u> , 169 (1963)
1960 R	The Convex Hull of Plane Brownian Motion	J. R. Kinney	Ann. Math. Stat. <u>34</u> , 327 (1963)
1961 R	The Effect of the Earth's Magnetic Field on Irregularities of Ionization in the E Layer	F. Villars § H. Feshbach §	J. Geophys. Res. <u>68</u> , 1303 (1963)
1962 R	Largest-Of N Selection Systems Affected by Multipath Time Spreading	J. Dumanian	Proc. IEEE (Correspondence) <u>51</u> , 390 (1963)
1963	Queueing of a Telephone Data Transmission System with Feedback	A. B. Fontaine	Trans. IEEE, Commun. Electron., No. 68, 449 (1963)
1965 R	The Relation Between the Chemical Potential of Electrons and Energy Parameters of the Band Theory as Applied to Semiconductors	W. W. Harvey	J. Phys. Chem. Solids <u>23</u> , 1545 (1962)
1966 R	Diurnal Variation of the Temperature of the F Region	J. V. Evans	J. Geophys. Res. <u>67</u> , 4914 (1962)
1967 R	Laminar-Turbulent Transition and Subsequent Motion Behind Hypervelocity Spheres	R. E. Slattery W. G. Clay	ARS J. <u>32</u> , 1427 (1962)
1969 R	Error Probabilities for Adaptive Multichannel Reception of Binary Signals: Addendum	R. Price	Trans. IRE, PGIT <u>IT-8</u> , 387 (1962)

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1970 R	Theory of Galvano-Thermomagnetic Energy Conversion Devices. III. Generators Constructed from Anisotropic Materials	T. C. Harman J. M. Honig	J. Appl. Phys. <u>34</u> , 189 (1963)
1971 R	Real-Channel Aspects of an Error-Free Data Transmission System for Toll-Grade Telephone Circuits	W. G. Schmidt	Trans. IEEE, PTGCS <u>CS-11</u> , 69 (1963)
1972 R	Superconducting Resonant Cavities	E. Maxwell	Progress in Cryogenics, Vol. 4 (Academic Press, New York, 1964)
1973A R	The Preparation and Properties of Some Vanadium Spinels	D. B. Rogers R. J. Arnott A. Wold J. B. Goodenough	J. Phys. Chem. Solids <u>24</u> , 347 (1963)
1974 R	A Pulse Compression System Employing a Linear FM Gaussian Signal	E. N. Fowle D. R. Carey R. E. VanderSchuur R. C. Yost	Proc. IEEE <u>51</u> , 304 (1963)
1976 R	The Sensitivity of Radio-metric Measurements	E. J. Kelly D. H. Lyons W. L. Root	J. Soc. Ind. Appl. Math. <u>11</u> , 235 (1963)
1978 R	The Admissible Mean Values of a Stochastic Process	T. S. Pitcher	Trans. Am. Math. Soc. <u>108</u> , 538 (1963)
1979 R	Angular and Magnitude Dispersion of the Anisotropy in Magnetic Films	T. S. Crowther	J. Appl. Phys. <u>34</u> , 580 (1963)
1980 R	Crystallographic Polarity of ZnO Crystals	A. N. Mariano R. E. Hanneman	J. Appl. Phys. <u>34</u> , 384 (1963)
1981 R	The Madistor - A Magnetically Controlled Semiconductor Plasma Device	I. Melngailis R. H. Rediker	Proc. IRE <u>50</u> , 2428 (1962)
1982 R	Optimal Stochastic Control	H. J. Kushner	Trans. IRE, PGAC <u>AC-7</u> , 120 (1962)
1983 R	Spectral Widths and Shapes and Other Characteristics of Incoherent Backscatter from the Ionosphere Observed at 440 Mcps during a 24-Hour Period in May 1961	V. C. Pineo D. P. Hynek	J. Geophys. Res. <u>67</u> , 5119 (1962)
1984 R	Gallium-Arsenide Diode Sends Television by Infrared Beam	R. H. Rediker R. J. Keyes T. M. Quist M. J. Hudson C. R. Grant R. G. Burgess	Electronics <u>35</u> , No. 40, 44 (1962)

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1986 R	The Design of a Constant-Angle or Power-Law Magnitude Impedance	R. M. Lerner	Trans. IEEE, PTGCT <u>CT-10</u> , 98 (1963)
1987 R	Comments on Similarity Considerations for Varactor Multipliers	P. Penfield § B. L. Diamond	Microwave J. <u>5</u> , No. 9, 22 (1962)
1988	A Lunar Theory Reasserted – A Rebuttal	J. V. Evans	J. Research Natl. Bur. Standards <u>67D</u> , 1 (1963)
1990 R	Exact Distribution Functions of Test Length for Sequential Processors with Discrete Input Data	J. G. Proakis	Trans. IEEE, PTGIT <u>IT-9</u> , 182 (1963)
1991 R	Operating Characteristics of Transverse (Nernst) Anisotropic Galvano-Thermomagnetic Generators	T. C. Harman J. M. Honig	Appl. Phys. Letters <u>1</u> , 31 (1962)
1992 R	Enhancement of Radar Reflectivity Associated with the Lunar Crater Tycho	G. H. Pettengill J. C. Henry	J. Geophys. Res. <u>67</u> , 4881 (1962)
1993 R	Velocity of Sound in Liquid Helium at Low Temperatures	W. M. Whitney § C. E. Chase	Phys. Rev. Letters <u>9</u> , 243 (1962)
1994 R	The Scattering Behavior of the Moon at Wavelengths of 3.6, 68 and 784 Centimeters	J. V. Evans G. H. Pettengill	J. Geophys. Res. <u>68</u> , 423 (1963)
1995 R	Operating Characteristics of Nernst Refrigerators for Anisotropic Materials	T. C. Harman J. M. Honig	J. Appl. Phys. <u>34</u> , 239 (1963)
1997 R	On the Sample Functions of Processes Which Can Be Added to a Gaussian Process	T. S. Pitcher	Ann. Math. Stat. <u>34</u> , 329 (1963)
1998	Golden Years of Applied Science	B. Lax	Microwave J. <u>5</u> , No. 10, 13 (1962)
2000 R	Nonlinear Effects in Solids	P. L. Kelley	J. Phys. Chem. Solids <u>24</u> , 607 (1963)
2001 R	Magnetoreflection in Bismuth	R. N. Brown J. G. Mavroides B. Lax	Phys. Rev. <u>129</u> , 2055 (1963)
2004 R	Low-Cost Thermocouple Potentiometer	F. T. Worrell	Am. J. Phys. <u>31</u> , 216 (1963)
2005 R	High-Field Superconductivity in Niobium	S. H. Autler E. S. Rosenblum K. H. Gooen §	Phys. Rev. Letters <u>9</u> , 489 (1962)

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2007A R	Experimental Study of Charge Drag on Orbiting Dipoles	I. I. Shapiro I. Maron § L. G. Kraft, Jr.	J. Geophys. Res. 68, 1845 (1963)
2008 R	Switching Thresholds of Weakly Coupled Ferromagnetic Domains	K. J. Harte D. O. Smith	J. Appl. Phys. 34, 442 (1963)
2009 R	The Microwave Spectrum of Oxygen in the Earth's Atmosphere	M. L. Meeks A. E. Lilley §	J. Geophys. Res. 68, 1683 (1963)
2012 R	Computation with Finite Fields	T. C. Bartee D. I. Schneider	Inform. and Control 6, 79 (1963)
2013 R	Helium-Cooled L-Band Parametric Amplifier	C. Blake L. W. Bowles E. P. McCurley J. A. Nuttall	Appl. Phys. Letters 2, 17 (1963)
2014 R	Galvano-Thermomagnetic Phenomena. IV. Application to Anisotropic Adiabatic Nernst Generators	T. C. Harman J. M. Honig B. M. Tarmy	J. Appl. Phys. 34, 2215 (1963)
2015 R	The Degarbler - A Program for Correcting Machine-Read Morse Code	C. K. McElwain M. B. Evens	Inform. and Control 5, 368 (1962)
2016	Correlated Orientation Sounds and Ear Movements of Horseshoe Bats	D. A. Cahlander F. A. Webster § D. R. Griffin § D. C. Dunning §	Nature 196, 1185 (1962)
2018 R	Criteria for the Optimization of the Nernst Figure of Merit	T. C. Harman	Appl. Phys. Letters 2, 13 (1962)
2019 R	Pitch-Induced Spectral Distortion in Channel Vocoders	B. Gold J. Tierney	J. Acoust. Soc. Am. 35, 730 (1963)
2021A R	Convergent Perturbation Expansions for Certain Wave Operators	R. T. Prosser	J. Math. Phys. 5, 708 (1964)
2022 R	Key to Faster Computers: Ten-Nanosecond Amplifier	K. H. Konkle J. E. Laynor	Electronics 35, No. 50, 39 (1962)
2023 R	A Survey of Varactor Diode Parametric Amplifier Characteristics	C. Freed	Microwave J. 6, No. 1, 75 (1963)
2024 R	The Imitation of Man by Machine	U. Neisser	Science 139, 193, (1963)

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2026 R	Aberration Theories for Semi-automatic Lens Design by Electronic Computers. I. Preliminary Remarks; II. A Specific Computer Program	D. S. Grey	J. Opt. Soc. Am. <u>53</u> , 672 (1963)
2028 R	Injection Electroluminescence in Gallium Antimonide	A. R. Calawa	J. Appl. Phys. <u>34</u> , 1660 (1963)
2031 R	Is the Slug Necessary?	F. T. Worrell	Am. J. Phys. <u>31</u> , 305 (1963)
2032-I R	Theory of Semiconductor Maser of GaAs	A. L. McWhorter H. J. Zeiger B. Lax	J. Appl. Phys. <u>34</u> , 235 (1963)
2032-II R	Semiconductor Maser of GaAs	T. M. Quist R. H. Rediker R. J. Keyes W. E. Krag B. Lax A. L. McWhorter H. J. Zeiger	Appl. Phys. Letters <u>1</u> , 94 (1962)
2033 R	Nonlinear Oscillations of Fixed Period	J. J. Levin S. S. Shatz	J. Math. Anal. Appl. <u>7</u> , 284 (1963)
2034 R	Keeping Track of Several Things at Once	D. B. Yntema	Human Factors <u>5</u> , 7 (1963)
2035	Cyclotron Resonance and Magneto-Optical Effects in Semiconductors	B. Lax	Proceedings of the International School of Physics Enrico Fermi, (Academic Press, New York, 1963)
2036 R	Phenomena at a Solid-Melt Interface	J. R. O'Connor	J. Electrochem. Soc. <u>110</u> , 338 (1963)
2037 R	Oscillatory Quantum Effects in the Ultrasonic Velocity in Bismuth	J. G. Mavroides B. Lax K. J. Button Y. Shapira §	Phys. Rev. Letters <u>9</u> , 451 (1962)
2038 R	Effect of a High-Altitude Nuclear Detonation on the Earth-Ionosphere Cavity	M. Balser C. A. Wagner	J. Geophys. Res. <u>68</u> , 4115 (1963)
2039 R	Galvano-Thermomagnetic Effects in Semiconductors and Semimetals. III. The Standard and Kane Band Models	T. C. Harman J. M. Honig B. M. Tarmy	J. Phys. Chem. Solids <u>24</u> , 835 (1963)
2040 R	High-Field Antiferromagnetic Resonance in Cr ₂ O ₃	S. Foner	Phys. Rev. <u>130</u> , 183 (1963)

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2041A R	Propagation Constants for TE and TM Surface Waves on an Anisotropic Dielectric Cylinder	P. R. Longaker C. S. Roberts §	Trans. IEEE, PTGMMT <u>MTT-11</u> , 543 (1963)
2042 R	Color Centers in Alkaline Earth Fluorides	J. R. O'Connor J. H. Chen §	Phys. Rev. <u>130</u> , 1790 (1963)
2043 R	High Speed Heterojunction Photodiodes and Beam-of-Light Transistors	R. H. Rediker T. M. Quist B. Lax	Proc. IEEE (Correspondence) <u>51</u> , 218 (1963)
2044 R	Likelihood Ratios for Stochastic Processes Related by Groups of Transformations, II	T. S. Pitcher	Illinois J. Math <u>8</u> , 271 (1964)
2045 R	High-Pressure Tetragonal Phase of InSb	M. D. Banus R. E. Hanneman A. N. Mariano E. P. Warekois H. C. Gatos J. A. Kafalas	Appl. Phys. Letters <u>2</u> , 35 (1963)
2046A R	Asymptotically Optimum Quantizers and Optimum Analog to Digital Converters for Continuous Signals	L. Bluestein	Accepted Trans. IEEE, PTGIT
2048 R	Modern Radar	H. G. Weiss	Intl. Sci. and Tech. No. 13, 75 (1963)
2049 R	Heat-Transfer Intensity from Induction Plasma Flames and Oxy-Hydrogen Flames	T. B. Reed	J. Appl. Phys. <u>34</u> , 2266 (1963)
2050 R	Magnetoelastic Sensitivities in Evaporated and Electro-deposited Permalloy Films	I. W. Wolf § T. S. Crowther	J. Appl. Phys. <u>34</u> , 1205 (1963)
2052 R	Criterion for Continuous Amplitude Oscillations of Optical Masers	J. I. Kaplan	J. Appl. Phys. <u>34</u> , 3411 (1963)
2053 R	Radar Observations of Venus, 1961 and 1959	W. B. Smith	Astron. J. <u>68</u> , 45 (1963)
2055 R	Neurophysiological Investigations of the Bat, <u>Myotis lucifugus</u> , Stimulated by Frequency Modulated Acoustical Pulse	A. D. Grinnell § J. J. G. McCue	Nature <u>198</u> , 453 (1963)
2056 R	Growing Helical Density Waves in Semiconductor Plasmas	C. E. Hurwitz A. L. McWhorter	Phys. Rev. Letters <u>10</u> , 20 (1963)

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2057 R	On the Minimum <i>a priori</i> Information Necessary to Construct Adaptive Filters for Stationary Time Series	H. J. Kushner	Trans. IEEE, PTGAC <u>AC-8</u> , 179 (1963)
2059 R	Signal and Context Components of Word-Recognition Behavior	A. N. Stowe W. P. Harris D. B. Hampton §	J. Acoust. Soc. Am. <u>35</u> , 639 (1963)
2060 R	Time-, Fuel-, and Energy-Optimal Control of Nonlinear Norm-Invariant Systems	M. Athans P. L. Falb R. T. Laessos §	Trans. IEEE, PTGAC <u>AC-8</u> , 196 (1963)
2061A R	Cryogenics for the Electronics Engineer	J. W. Meyer A. M. Rieh	Electronics <u>36</u> , No. 35, 29 (1963)
2062 R	Second Harmonic Generation in Solids	P. L. Kelley	J. Phys. Chem. Solids <u>24</u> , 1113 (1963)
2064 R	The Orthomatech Data Transmission System	B. G. Kuhn K. H. Morey W. B. Smith	Trans. IEEE, PTGSET <u>SET-9</u> , 63 (1963)
2065	New Light Sources	B. Lax	McGraw-Hill Yearbook of Science and Technology (1963)
2066 R	Measurement of Internal Friction in Thin Films	G. P. Weiss D. O. Smith	Rev. Sci. Instr. <u>34</u> , 522 (1963)
2067 R	Theory of Galvano-Thermomagnetic Energy Conversion Devices. V. Devices Constructed from Anisotropic Materials	T. C. Harman J. M. Honig B. M. Tarmy	J. Appl. Phys. <u>34</u> , 2225 (1963)
2068 R	Anomalous Thermoelectric Power as Evidence for Two Valence Bands in SnTe	R. F. Brebrick A. J. Strauss	Phys. Rev. <u>134</u> , 104 (1963)
2069 R	The Influence of Anisotropy Dispersion on Magnetic Properties of Ni-Fe Films	M. S. Cohen	J. Appl. Phys. <u>34</u> , 1841 (1963)
2070 R	Instantaneous Spectra and Ambiguity Functions	M. J. Levin	Trans. IEEE, PTGIT <u>IT-10</u> , 95 (1964)
2073 R	Equalization and Cancellation Theory of Binaural Masking-Level Differences	N. I. Durlach	J. Acoust. Soc. Am. <u>35</u> , 1206 (1963)
2074 R	A Note on "Very Noisy" Channels	B. Reiffen	Inform. and Control <u>6</u> , 126 (1963)
2075 R	On a Nonlinear Delay Equation	J. J. Levin J. A. Nohel §	J. Math. Anal. Appl. <u>8</u> , 31 (1964)
2076 R	Optical Communications Employing Infrared Emitting Diodes and FM Techniques	E. J. Chatterton	Proc. IEEE (Correspondence) <u>51</u> , 612 (1963)

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2078 R	Interactions Between a Hypersonic Wave and a Following Hypersonic Projectile	R. E. Slattery W. G. Clay R. R. Stevens	AIAA J. <u>1</u> , 974 (1963)
2079 R	A Low-Level Peak Holding Circuit Using an Operational Amplifier	K. H. Morey K. E. Perry	Proc. IEEE (Correspondence) <u>51</u> , 953 (1963)
2083 R	Matched Filter Approximation Errors	M. J. Levin	Trans. IEEE, PTGCS <u>CS-11</u> , 254 (1963)
2084	Encapsulating Precision Antennas in Plastic	C. A. Pappas E. B. Murphy	Electronics <u>36</u> , No. 10, 68 (1963)
2085A R	Nernst and Seebeck Coefficients in Bismuth at High Magnetic Fields	T. C. Harman J. M. Honig	Adv. Energy Conversion <u>3</u> , 525 (1963)
2086 R	The Thermodynamic Activity of the Semiconductor	W. W. Harvey	J. Phys. Chem. Solids <u>24</u> , 701 (1963)
2087 R	Geomagnetic Effects on the Frequency Spectrum of Incoherent Backscatter Observed at 425 Mcps at Trinidad	V. C. Pineo D. P. Hynek G. H. Millman §	J. Geophys. Res. <u>68</u> , 2695 (1963)
2088 R	Adaptation to Displaced Vision: Visual, Motor, or Proprioceptive Change?	C. S. Harris §	Science <u>140</u> , 812 (1963)
2089A R	Galvano-Thermomagnetic Effects in Multi-Band Models	J. M. Honig T. C. Harman	Adv. Energy Conversion <u>3</u> , 529 (1963)
2090 R	Thermal Conduction in Liquid Helium II. Effects of Channel Geometry	C. E. Chase	Phys. Rev. <u>131</u> , 1898 (1963)
2091 R	Quantitative Mass Spectrography of Solids	E. B. Owens N. A. Giardino	Anal. Chem. <u>35</u> , 1172 (1963)
2092	Chemical Behavior of Semiconductors: Etching Characteristics	H. C. Gatos M. C. Lavine	Progress in Semiconductors, Vol. 7 (Wiley, New York, 1963)
2094 R	Preparation of Actual-Size Printed Wiring Layouts	E. A. Guditz	Trans. IEEE, PTGPEP <u>PEP-7</u> , 24 (1963)
2096 R	Radar Astronomy	G. H. Pettengill	Trans. Am. Geophys. Un. <u>44</u> , (1963)
2097 R	Liquid-Helium Temperature Regulator	C. Blake C. E. Chase	Rev. Sci. Instr. <u>34</u> , 984 (1963)
2098 R	Small Phase-Shift Vacuum Can for Low Temperature ac Susceptibility Measurements	M. Strongin E. Maxwell	Rev. Sci. Instr. <u>34</u> , 590 (1963)

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2109 R	Relativistic Potential Scattering	R. T. Prosser	J. Math. Phys. <u>4</u> , 1048 (1963)
2100 R	Exchange Energy of an Electron Gas in a Periodic Potential	L. Eyges	Phys. Rev. <u>130</u> , 2218 (1963)
2101 R	The Influence of Terrain Shielding on Radio Wave Propagation at 8000 Mc	W. E. Morrow D. Karp R. V. Locke, Jr. W. C. Provencher	Proc. IEEE (Correspondence) <u>51</u> , 955 (1963)
2102 R	Modulated Infrared Diode Spans 30 Miles	R. J. Keyes	Electronics <u>36</u> , No. 14, 38 (1963)
2103 R	Filamentary Structure in Superconductors	E. Maxwell M. Strongin	Phys. Rev. Letters <u>10</u> , 212 (1963)
2104	Field Experiments Pertaining to Hypersonic Wakes and Trails	S. Edelberg	Accepted AIAA J.
2105 R	Error Statistics and Coding for Digital Data Transmission over Telephone and Teletype Circuits	A. B. Fontaine	Proc. IEEE (Correspondence) <u>51</u> , 474 (1963)
2106 R	A Lower Bound on Stability in Phase-Locked Loops	H. L. VanTrees	Inform. and Control <u>6</u> , 195 (1963)
2108 R	A Proposed UHF Transistor Using an Electroluminescent Emitter and a Collector-Base Heterojunction	A. G. Foyt	Proc. IEEE (Correspondence) <u>51</u> , 853 (1963)
2109 R	The Resistance of Bats to Jamming	D. R. Griffin § J. J. G. McCue A. D. Grinnell §	J. Exptl. Zoology <u>152</u> , 229 (1963)
2111 R	Prototypes for Use in Broadbanding Reflection Amplifiers	W. J. Getsinger	Trans. IEEE, PTGMTT <u>MTT-11</u> , 486 (1963)
2112	Directed Heating with Atoms, Electrons and Photons	T. B. Reed	ASM Technical Report No. NY9.4.62 (Natl. Metal Cong., New York, 1962)
2113 R	Application of Sequential Decoding to High-Rate Data Communication on a Telephone Line	I. L. Lebow P. G. McHugh A. C. Parker P. Rosen J. M. Wozencraft §	Trans. IEEE, PTGIT <u>IT-9</u> , 124 (1963)
2115 R	Acoustical Control of Airborne Interceptions by Bats	F. A. Webster §	Proc. Intl. Cong. on Technology and Blindness, Vol. 1, New York, June 1962
2116 R	The Reaction of Rare Earth Oxides with a High Temperature Form of Rhodium (III) Oxide	A. Wold R. J. Arnott W. Croft	J. Inorg. Chem. <u>2</u> , 972 (1963)

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2117A R	Electron Ordering Transitions in Several Chromium Spinel Systems	R. J. Arnott A. Wold D. B. Rogers	J. Phys. Chem. Solids <u>25</u> , 164 (1964)
2119 R	Observations of Ionospheric Movements by Incoherent Scattering	G. H. Millman § V. C. Pineo D. P. Hynek	J. Geophys. Res. <u>68</u> , 3323 (1963)
2120 R	Segal's Quantization Procedure	R. T. Prosser	J. Math. Phys. <u>5</u> , 701 (1964)
2122 R	Electron Paramagnetic Resonance of Cr ³⁺ in SnO ₂	W. H. From	Phys. Rev. <u>131</u> , 961 (1963)
2123 R	On the Dynamical Equations of Conditional Probability Density Functions, with Applications to Optimal Stochastic Control Theory	H. J. Kushner	J. Math. Anal. Appl. <u>8</u> , 332 (1964)
2124 R	Equivalence and Antiequivalence of Irreducible Sets of Operators. I. Finite Dimensional Spaces	J. S. Lomont H. E. Moses K. Yu §	J. Math. Phys. <u>4</u> , 420 (1963)
2126 R	On the Optimum Timing of Observations for Linear Control Systems with Unknown Initial State	H. J. Kushner	Trans. IEEE, PTGAC <u>AC-9</u> , 144 (1964)
2128 R	Effects of Sunlight Pressure on Air Density Determinations Involving Cylindrical Satellites	I. I. Shapiro	J. Geophys. Res. <u>68</u> , 5349 (1963)
2129 R	Negative Anisotropy in Nickel-Iron Films	D. O. Smith	Appl. Phys. Letters <u>2</u> , 191 (1963)
2130A R	Scattering of Electromagnetic Waves from Dielectric Coated Conducting Spheres	J. Rheinstein	Trans. IEEE, PTGAP <u>AP-12</u> , 334 (1964)
2131 R	Evidence for the Role of Donor States in GaAs Electroluminescence	F. L. Galeener § G. B. Wright W. E. Krag T. M. Quist H. J. Zeiger	Phys. Rev. Letters <u>10</u> , 472 (1963)
2133 R	Cleaning Vacuum Systems by Flushing	F. T. Worrell	Vacuum <u>13</u> , 309 (1963)
2134	Infinite Dimensional Control Problems. I. On the Closure of the Set of Attainable States for Linear Systems	P. L. Falb	Accepted J. Math. Anal. Appl.
2136	Compounds with the B31 Structure. II. Magnetic Properties of MnP	E. E. Huber, Jr. D. H. Ridgley	Accepted Phys. Rev.

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2137 R	The Use of CO-CO ₂ Atmospheres for the Preparation and Free Energy Determinations of Several Oxide Systems	W. Kunmann D. B. Rogers A. Wold	J. Phys. Chem. Solids <u>24</u> , 1535 (1963)
2138 R	Quantum Theory of Kinetic Equations for Electrons in Phonon Fields	P. N. Argyres	Phys. Rev. <u>132</u> , 1527 (1963)
2139	Maser Action in InAs Diodes	I. Melngailis	Appl. Phys. Letters <u>2</u> , 176 (1963)
2140 R	Recall as a Search Process	D. B. Yntema F. P. Trask	J. Verb. Learning and Verb. Behav. <u>2</u> , 65 (1963)
2141 R	Second-Order Exchange Interactions from Spin Wave Resonance	R. Weber P. E. Tannenwald	J. Phys. Chem. Solids <u>24</u> , 1357 (1963)
2142 R	Fast AGC Amplifier Locks Monopulse Radar on Target	W. W. Smith	Electronics <u>36</u> , No. 39, 34 (1963)
2143A R	Optical Spectra of Several d ¹ -Electron Systems	J. R. O'Connor J. H. Chen §	J. Phys. Chem. Solids <u>24</u> , 1382 (1963)
2144 R	Early Synchrotron Radiation Resulting from the July 9 High-Altitude Nuclear Detonation	M. BaIser J. H. Pannell	J. Geophys. Res. <u>68</u> , 4119 (1963)
2145 R	Time-Optimal Control for a Class of Nonlinear Systems	M. Athans P. L. Falb	Trans. IEEE, PTGAC <u>AC-8</u> , 379 (1963)
2147 R	The Assignment of Wave Functions to Energy Densities and Probability Densities	J. S. Lomont H. E. Moses	Nuovo Cimento <u>30</u> , 1291 (1963)
2148 R	A Maximum Principle for Stochastic Control Systems	H. J. Kushner F. C. Scheppe	J. Math. Anal. Appl. <u>8</u> , 287 (1964)
2149 R	Magnetically Tunable cw InAs Diode Maser	I. Melngailis R. H. Rediker	Appl. Phys. Letters <u>2</u> , 202 (1963)
2151	Parametric Upconverter Receiving Array	H. J. Pratt, Jr. N. G. Damocogna §	Accepted Microwave J.
2152 R	Semiconductor Lasers	B. Lax	Science <u>141</u> , 1247 (1963)
2153 R	Microwave Ultrasonics	P. E. Tannenwald	Microwave J. <u>6</u> , No. 12, 61 (1963)
2155 R	Properties of GaAs Alloy Diodes	R. H. Rediker T. M. Quist	Solid-State Electron. <u>6</u> , 657 (1963)
2156 R	A Free-Space Method of Measuring Radar Cross Section in the Laboratory	P. C. Fritsch	Proc. IEEE (Correspondence) <u>51</u> , 1271 (1963)

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2157 R	Some Interactions Between Vacuum Gauges	F. T. Worrell	Rev. Sci. Instr. <u>34</u> , 1352 (1963)
2158 R	Infrared and Visible Light Emission from Forward-Biased p-n Junctions	R. H. Rediker	Solid State Des. <u>4</u> , No. 8, 19 (1963)
2159	Parameter Estimation for Stochastic Processes	T. S. Pitcher	Accepted Acta Math.
2161 R	High-Power Low-Density Induction Plasmas	T. B. Reed	J. Appl. Phys. <u>34</u> , 3146 (1963)
2162 R	Measurement of Thermoelectric Materials and Devices	T. C. Harman	Semiconductor Prod. <u>6</u> , No. 9, 13 (1963)
2163 R	Nernst-Ettingshausen (Transverse) Energy Conversion	T. C. Harman J. M. Honig	Semiconductor Prod. <u>6</u> , No. 7, 19 (1963)
2165	VLF and LF Fields Propagating Near and Into a Rough Sea	R. M. Lerner J. Max	J. Research Natl. Bur. Standards
2166A R	Searching for Ten Targets Simultaneously	U. Neisser R. Novick § R. Lazar §	Percept. and Motor Skills <u>17</u> , (1963)
2167 R	Electromagnetic Theory of the Semiconductor Junction Laser	A. L. McWhorter	Solid-State Electron. <u>6</u> , 417 (1963)
2168 R	New Method for Investigating Micrometeoroid Fluxes	I. I. Shapiro	J. Geophys. Res. <u>68</u> , 4697 (1963)
2169	An Iterative Procedure for Computing Time-Optimal Controls	H. K. Knudsen	Trans. IEEE, PTGAC <u>AC-9</u> , 23 (1964)
2170 R	Complex AC Susceptibility of Some Supereconducting Alloys	M. Strongin E. Maxwell	Phys. Letters <u>6</u> , 49 (1963)
2171 R	Units in Vacuum Measurements	F. T. Worrell	Nature <u>199</u> , 476 (1963)
2173 R	Comparison of Line and Square Source Near Fields	L. J. Riardi R. C. Hansen §	Trans. IEEE, PTGAP <u>AP-11</u> , 711 (1963)
2175 R	Orbital Lifetime of the West Ford Dipoles	H. M. Jones C. W. Perkins I. I. Shapiro	Science <u>140</u> , 1173 (1963)
2176 R	Instability in the Magnetron Gauge	F. T. Worrell	Rev. Sci. Instr. <u>34</u> , 1384 (1963)
2178A R	A Sensitive Threshold Circuit Using Positive and Negative Nonlinear Feedback	R. C. Johnston	Proc. IEEE (Correspondence) <u>51</u> , 1788 (1963)
2179 R	Magnetic Susceptibility of Praseodymium Oxides	S. Kern	J. Chem. Phys. <u>40</u> , 208 (1964)

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2180 R	An Optimum Demodulator for Poisson Processes: Photon Source Detectors	B. Reiffen H. Sherman	Proc. IEEE <u>51</u> , 1316 (1963)
2182 R	Radar Observations of Venus at 38 Mcps	J. C. James R. P. Ingalls	Astron. J. <u>69</u> , 19 (1964)
2183	Some Physical Properties of Nonlinear Elastic Suspensions as Analyzed by the Averaging Method of Ritz	E. Jozefowicz	Machine Design <u>35</u> , 169 (24 Oct. 1963)
2184 R	Semiconductor Diode Masers of $(In_x Ga_{1-x})As$	I. Melngailis A. J. Strauss R. H. Rediker	Proc. IEEE (Correspondence) <u>51</u> , 1154 (1963)
2185	Threaded Plated-Through Holes	E. A. Guditz	Electron. Packaging and Prod. <u>3</u> , No. 9, 55 (1963)
2188 R	Method for Fabricating Strain-Free Gallium Surfaces	H. H. Ehlers D. F. Kolesar	Rev. Sci. Instr. <u>34</u> , 1054 (1963)
2189 R	Partitioned IR Cell	R. Teoste	Infrared Phys. <u>4</u> , 43 (1964)
2190A R	Theory of the Infinite Stage Nernst-Ettingshausen Refrigerator	T. C. Harman	Adv. Energy Conversion <u>3</u> , 667 (1963)
2192 R	The Radar Cross Section of the Moon	J. V. Evans G. H. Pettengill	J. Geophys. Res. <u>68</u> , 5098 (1963)
2193 R	Theory of the Faraday Effect in Solids	L. M. Roth	Phys. Rev. <u>133</u> , A542 (1964)
2194	Magnetoreflection Experiments in Graphite	M. S. Dresselhaus J. G. Mavroides	Carbon <u>1</u> , 263 (1964)
2197	Properties of InAs Diode Masers	I. Melngailis R. H. Rediker	Trans. IEEE, PTGED <u>ED-10</u> , 333 (1963)
2198 R	Index of Refraction of KDP	J. H. Dennis R. H. Kingston	Appl. Optics <u>2</u> , 1334 (1963)
2199A R	Visual Search	U. Neisser	Scientific American <u>210</u> , No. 6, 94 (1964)
2202 R	High Pressure Transition in InSb	R. E. Hanneman M. D. Banus H. C. Gatos	J. Phys. Chem. Solids <u>25</u> , 293 (1964)
2203A	The Variable-Drift Biased-Gap Klystron	I. Hefni	Proc. IEEE (Correspondence) <u>52</u> , 102 (1964)
2204 R	Band-Pass Filters with Linear Phase	R. M. Lerner	Proc. IEEE <u>52</u> , 249 (1964)

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2206 R	Cathode Particle Vapors in a Glow Discharge in Pulsed Diodes	F. T. Worrell H. A. Pike	J. Appl. Phys. <u>34</u> , 3491 (1963)
2207 R	Alignment of a Logarithmic Amplifier-Detector	R. E. Richardson	Rev. Sci. Instr. <u>34</u> , 1446 (1963)
2209 R	Hazards in Pulse Sequential Circuits	P. E. Wood, Jr.	Trans. IEEE, PTGEC <u>EC-13</u> , 151 (1964)
2214 R	Jahn-Teller Distortions Induced by Tetrahedral-Site Fe ²⁺ Ions	J. B. Goodenough	J. Phys. Chem. Solids <u>25</u> , 151 (1964)
2216 R	The Dimension of the Support of a Random Distribution Function	J. R. Kinney T. S. Pitcher	Bull. Am. Math. Soc. <u>70</u> , 161 (1964)
2218 R	A Faraday Rotation Measurement of the Ionospheric Perturbation Produced by a Burning Rocket	M. L. Stone L. E. Bird M. Balser	J. Geophys. Res. <u>69</u> , 971 (1964)
2219 R	Preparation and Properties of Sodium and Potassium Molybdenum Bronze Crystals	A. Wold W. Kunemann R. J. Arnott A. Ferretti	Inorg. Chem. <u>3</u> , 545 (1964)
2220 R	High-Pressure Phases of Some Compounds of Groups II-VI	A. N. Mariano E. P. Warekois	Science <u>142</u> , 672 (1963)
2223 R	Helium Temperature Ultraviolet Reflectometer for Use with Modified Spectrograph	W. J. Scouler	Appl. Optics <u>3</u> , 341 (1964)
2224 R	Current Regulator for Ultraviolet Light Source	W. J. Scouler E. D. Mills	Rev. Sci. Instr. <u>35</u> , 489 (1964)
2225 R	Reflectivity of HgSe and HgTe from 4 to 12 eV at 12 and 300°K	W. J. Scouler G. B. Wright	Phys. Rev. <u>133</u> , A736 (1964)
2226 R	Optimum Power Division in Coherent Communication Systems	H. L. VanTrees	Trans. IEEE, PTGSET <u>SET-10</u> , 1 (1964)
2227 R	Internal Second-Harmonic Generation in Gallium Arsenide Lasers	L. D. Malmstrom J. J. Schlickman R. H. Kingston	J. Appl. Phys. <u>35</u> , 248 (1964)
2228 R	On Adding Independent Stochastic Processes	T. S. Pitcher	Ann. Math. Stat. <u>35</u> , 872 (1964)
2231 R	A Technique for Achieving High Bit Packing Density on Magnetic Tape	J. E. Gillis	Trans. IEEE, PTGEC <u>EC-13</u> , 112 (1964)
2232	Basic Science at the Crossroads	B. Lax	Microwave J. <u>7</u> , No. 1, 16 (1964)

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2233	The Analysis of the Abrupt Junction Varactor Doubler as a Function of Frequency	A. I. Grayzel	Accepted Trans. IEEE, PTGCT
2234 R	Energy Gap Measurements by Tunneling Between Superconducting Films. I. Temperature Dependence	D. H. Douglass, Jr. R. H. Meservey	Phys. Rev. <u>135</u> , A19 (1964)
2235	Energy Gap Measurements by Tunneling Between Superconducting Films. II. Magnetic Field Dependence	R. H. Meservey D. H. Douglass, Jr.	Phys. Rev. <u>135</u> , A24 (1964)
2237	A Proposed Spacecraft-to-Earth Communications Link – The Unified Carrier Approach	W. F. Higgins J. G. Barry G. F. Dalrymple J. C. Fielding B. B. Goldstein	Accepted Trans. IEEE
2238 R	The Dependence of the Upper Critical Field of Niobium on Temperature and Resistivity	E. S. Rosenblum S. H. Autler K. H. Gooen §	Rev. Modern Phys. <u>36</u> , 77 (1964)
2240 R	The Representations of the Inhomogeneous Lorentz Group in Terms of an Angular Momentum Basis	J. S. Lomont H. E. Moses	J. Math. Phys. <u>5</u> , 294 (1964)
2241A R	Ceramic Double Cell for Crystal Growth by Fused Salt Electrolysis	W. Kunmann A. Ferretti	Rev. Sci. Instr. <u>35</u> , 465 (1964)
2243 R	High-Pressure Transitions in $A^{(III)}B^{(VI)}$ Compounds. I. Indium Telluride	M. D. Banus R. E. Hanneman M. Strongin K. Gooen §	Science <u>142</u> , 662 (1963)
2245	Performance of Coherent Detection Systems Using Decision-Directed Channel Measurement	J. G. Proakis P. R. Drouilhet, Jr. R. Price	Trans. IEEE, PTGCS CS-12, 54 (1964)
2246 R	Infrared InSb Laser Diode in High Magnetic Fields	R. J. Phelan A. R. Calawa R. H. Rediker R. J. Keyes B. Lax	Appl. Phys. Letters <u>3</u> , 143 (1963)
2247	Semiconductor Lasers	B. Lax	Solid State Des. <u>4</u> , No. 11, 26 (1963)
2249	The Application of Semiconductor Optical Radiators to Space Communication	B. S. Goldstein J. D. Welch	Accepted Trans. IEEE
2250	An Acquirable Code	D. Gorenstein § E. Weiss	Accepted Inform. and Control

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2252 R	Observations of Venus, the Region of Taurus A, and the Moon at 8.5-Millimeter Wavelength	V. L. Lynn M. L. Meeks M. D. Sohigian	Astron. J. <u>69</u> , 65 (1964)
2253A R	The Nernst-Ettingshausen Energy Conversion Figure of Merit for Bi and Bi-4% Sb Alloys	T. C. Harman J. M. Honig S. Fischler A. E. Paladino	Solid-State Electron. <u>7</u> , 505 (1964)
2254 R	Refined Treatment of the Theory Pertaining to Operating Characteristics of Anisotropic Nernst-Ettingshausen Devices	J. M. Honig B. M. Tarmy	J. Appl. Phys. <u>35</u> , 722 (1964)
2255	Near-Field Characteristics of a Linear Array	L. J. Ricardi	Accepted Microwave J.
2258	The Laser - A Long Range Future	B. Lax	Solid State Des. <u>4</u> , No. 11 (1963)
2260 R	Bulk Solution of Ginzburg-Landau Equations for Type II Superconductor: Upper Critical Field Region	W. H. Kleiner L. M. Roth S. H. Autler	Phys. Rev. <u>133</u> , A1226 (1964)
2261	Parametric Analysis of Jammed Active Satellite Links	B. Reiffen H. Sherman	Trans. IEEE, PTGCS <u>CS-12</u> , 102 (1964)
2262 R	Radar Observations of the Moon at a Wavelength of 8.6 Millimeters	V. L. Lynn M. D. Sohigian E. A. Crocker	J. Geophys. Res. <u>69</u> , 781 (1964)
2264 R	Two-Step Raman Scattering in Nitrobenzene	H. J. Zeiger P. E. Tannenwald S. Kern R. Herendeen	Phys. Rev. Letters <u>11</u> , 419 (1963)
2265 R	Superconductivity in the High-Pressure InSb-Beta-Sn System	S. D. Nye M. D. Banus H. C. Gatos	J. Appl. Phys. <u>35</u> , 1361 (1964)
2266 R	The Determination of Distance by Echolocating Bats	D. A. Cahlander J. J. G. McCuc F. A. Webster §	Nature <u>201</u> , 544 (1964)
2268 R	Galvanomagnetic Effects in n-Type Germanium	W. E. Krag M. C. Brown	Phys. Rev. <u>134</u> , A779 (1964)
2270 R	Partial Pressures in Equilibrium with Group IV Tellurides. I. Optical Absorption Method and Results for PbTe	R. F. Brebrick A. J. Strauss	J. Chem. Phys. <u>40</u> , 3230 (1964)
2271	Classical Ground State Spin Configurations in the Corundum Lattice	N. Menyuk K. Dwight	Accepted J. Phys. Chem. Solids

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2272	A Cluster Method for Finding Minimum Energy Spin States	D. H. Lyons T. A. Kaplan	Accepted J. Phys. Chem. Solids
2273 R	A Direct Constructive Proof of the Criterion for Complete Controllability of Time-Invariant Linear Systems	P. L. Falb M. Athans	Trans. IEEE, PTGAC AC-9, 189 (1964)
2274 R	Report on Progress in Information Theory in the U.S.A., 1960-1963: Communication and Radar, Section A, General	R. Price G. L. Turin	Trans. IEEE, PTGIT IT-9, 240 (1963)
2275 R	High-Pressure Phase Transition in Tin Telluride	J. A. Kafalas A. N. Mariano	Science 143, 952 (1964)
2276 R	Ultrasonic Measurements in Normal and Superconducting Niobium	R. Weber	Phys. Rev. 133, A1487 (1964)
2277	Theory of Spin Resonance and Relaxation	P. N. Argyres P. L. Kelley	Phys. Rev. 134, A98 (1964)
2280 R	Tunable Lasers	R. H. Rediker	Electron. Design 12, No. 1, 47 (1964)
2282 R	Cascade Capture of Electrons by Ionized Impurities	D. R. Hamann A. L. McWhorter	Phys. Rev. 134, A250 (1964)
2283 R	Noise Measurements on He-Ne Laser Oscillators	J. A. Bellisio § C. Freed H. A. Haus §	Appl. Phys. Letters 4, 5 (1964)
2285	Partial Pressures in Equilibrium with Group IV Tellurides. II. Tin Telluride	R. F. Brebrick A. J. Strauss	J. Chem. Phys. 41, 197 (1964)
2286	A Portable Receiver for Ultrasonic Waves in Air	J. J. G. McCue A. Bertolini	Accepted Trans. IEEE, PTGSU
2288 R	Radio Observations of OH in the Interstellar Medium	S. Weinreb A. H. Barrett § M. L. Meeks J. C. Henry	Nature 200, 829 (1963)
2290 R	Magnetic Tuning of CW InSb Diode Laser	R. J. Phelan R. H. Rediker	Proc. IEEE (Correspondence) 52, 94 (1964)
2291 R	A New Method of Measuring Small Radar Cross Sections by Digital Vector-Field Subtraction	P. C. Fritsch F. E. Heart	Proc. IEEE (Correspondence) 52, 628 (1964)
2292	Estimation of a System Pulse Transfer Function in the Presence of Noise	M. J. Levin	Accepted Trans. IEEE, PTGAC

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2293 R	Growing Helical Density Waves in Semiconductor Plasmas	C. E. Hurwitz A. L. McWhorter	Phys. Rev. <u>134</u> , A1033 (1964)
2294 R	Semiconductor Lasers	T. M. Quist	Intl. Sci. and Tech. No. 26, 80 (1964)
2295	Interface-Alloy Epitaxial Heterojunctions	R. H. Rediker S. Stopek J. H. R. Ward	Accepted Solid-State Electron.
2296 R	Growth of $(\text{Ga}_x\text{In}_{1-x})\text{As}$ Single Crystals by Vapor Phase Reaction	R. C. Sirrine	J. Electrochem. Soc. <u>111</u> , 750 (1964)
2297 R	Signal Design for Dispersive Channels	R. S. Kennedy I. L. Lebow	IEEE Spectrum <u>1</u> , No. 3, 231 (1964)
2299 R	Ionospheric Temperatures During the Launch of NASA Rocket 8.14 on July 2, 1963	J. V. Evans	J. Geophys. Res. <u>69</u> , 1436 (1964)
2300	Radar Evidence of Solar Wind	J. H. Chisholm J. C. James	Accepted Astrophys. J.
2302 R	Injection Luminescent Pumping of $\text{CaF}_2:\text{U}^{3+}$ with GaAs Diode Lasers	R. J. Keyes T. M. Quist	Appl. Phys. Letters <u>4</u> , 50 (1964)
2303 R	2000-A Pulse Generator	N. A. Sullivan	Rev. Sci. Instr. <u>35</u> , 639 (1964)
2304 R	On Array Element Impedance Variation with Spacing	J. L. Allen	Trans. IEEE, PTGAP <u>AP-12</u> , 371 (1964)
2306 R	Interferometric Phase Shift Technique for Measuring Short Fluorescent Lifetimes	R. J. Carbone P. R. Longaker	Appl. Phys. Letters <u>4</u> , 32 (1964)
2307 R	Impurity States in Semiconducting Masers	H. J. Zeiger	J. Appl. Phys. <u>35</u> , 1657 (1964)
2310	The Relation of the Initial Costate to the Cost Surface in Optimal Systems	H. K. Knudsen M. Athans	Accepted Trans. IEEE, PTGAC
2312 R	A Theory of Thermoluminescence of Fluorite ($\text{CaF}_2:\text{Y}$). Recombination from Highly Associated Electron-Hole Pairs	J. R. O'Connor	Appl. Phys. Letters <u>4</u> , 126 (1964)
2316 R	Generalizations of the Jost Functions	H. E. Moses	J. Math. Phys. <u>5</u> , 833 (1964)
2317-1 R	The Lincoln Laboratory West Ford Program - An Historical Perspective	C. F. J. Overhage W. H. Radford	Proc. IEEE <u>52</u> , 452 (1964)

Journal Articles

JA No.

2317-2 R	The West Ford Experiment – An Introduction to This Issue	W. E. Morrow, Jr. T. F. Rogers	Proc. IEEE <u>52</u> , 461 (1964)
2317-3 R	Orbital Properties of the West Ford Dipole Belt	I. I. Shapiro H. M. Jones C. W. Perkins	Proc. IEEE <u>52</u> , 469 (1964)
2317-4 R	Measured Physical Characteristics of the West Ford Belt	F. E. Heart D. Karp A. A. Mathiasen F. Nagy, Jr. W. R. Crowther W. B. Smith	Proc. IEEE <u>52</u> , 519 (1964)
2317-5 R	RF Characteristics of Thin Dipoles	C. L. Mack, Jr. B. Reiffen	Proc. IEEE <u>52</u> , 533 (1964)
2317-6 R	The West Ford Belt as a Communications Medium	I. L. Lebow P. R. Drouilhet, Jr. N. L. Daggett J. N. Harris F. Nagy, Jr.	Proc. IEEE <u>52</u> , 543 (1964)
2317-7 R	Effects of the West Ford Belt on Astronomical Observations	D. C. MacLellan W. E. Morrow, Jr. I. I. Shapiro	Proc. IEEE <u>52</u> , 564 (1964)
2317-8 R	The West Ford Payload	P. Waldron D. C. MacLellan M. C. Croeker	Proc. IEEE <u>52</u> , 571 (1964)
2317-9 R	West Ford Radar and Microwave Equipment	B. E. Nichols D. Karp	Proc. IEEE <u>52</u> , 576 (1964)
2317-10 R	West Ford Antenna and Feed System	B. F. LaPage E. W. Blaisdell L. J. Riardi	Proc. IEEE <u>52</u> , 589 (1964)
2317-11 R	The Antenna Pointing System for West Ford	F. E. Heart A. A. Mathiasen	Proc. IEEE <u>52</u> , 599 (1964)
2323	A Note on the Equivalence of Certain Realizations of Boson Annihilation and Creation Operators Due to K. O. Friedreichs	H. E. Moses	Accepted Communs. Pure and Appl. Math.
2324	A Proposal for an Associative Memory Using Magnetic Films	J. I. Raffel T. S. Crowther	Accepted Trans. IEEE, PTGEC
2326 R	Oriented Single-Crystal Bismuth Nernst-Ettingshausen Refrigerators	T. C. Harman J. M. Ilonig S. Fischler A. E. Paladino M. J. Button	Appl. Phys. Letters <u>4</u> , 77 (1964)
2328 R	Evidence That SnTe Is a Semiconductor	J. A. Kafalas R. F. Brebriek A. J. Strauss	Appl. Phys. Letters <u>4</u> , 93 (1964)

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2331	Evaluation of Likelihood Functions for Gaussian Signals	F. C. Schweppe	Accepted Trans. IEEE, PTG1T
2333	A Note on Buzz-Hiss Detection	B. Gold	Accepted J. Acoust. Soc. Am.
2334 R	Bandpass Compressor: A New Type of Speech-Compression Device	B. Gold C. M. Rader	J. Acoust. Soc. Am. <u>36</u> , 1215 (1964)
2337 R	Output Power from GaAs Lasers at Room Temperature	C. C. Gallagher * B. S. Goldstein P. C. Tandy * J. D. Welch	Proc. IEEE (Correspondence) <u>52</u> , 717 (1964)
2339 R	Microwave Modulation of a GaAs Injection Laser	B. S. Goldstein J. D. Welch	Proc. IEEE (Correspondence) <u>52</u> , 715 (1964)
2346	Some Non-Central F-Distributions Expressed in Closed Form	R. Price	Accepted Biometrika
2348 R	High-Resolution Microwave Spectra of H and OH Absorption Lines of Cassiopeia A	A. H. Barrett * M. L. Meeks S. Weinreb	Nature <u>202</u> , 475 (1964)
2349	Note on Quantum Effects in Radiometer Observations	T. Hagfors M. L. Meeks	Accepted Astron. J.
2351	The Frequency Dependence of the Powers and Impedances of Varactor Frequency Multipliers	A. I. Grayzel	Accepted Proc. IEEE
2355	The Bandwidth of the Abrupt Junction Varactor Frequency Doubler	A. I. Grayzel	Accepted Trans. IEEE, PTGCT
2357	Radar Echoes from the Sun	J. C. James	Accepted Trans. IEEE, PTGMIL
2359 R	Acoustic Plasma Waves in Semimetals	A. L. McWhorter W. G. May	IBM J. Research Develop. <u>8</u> , 285 (1964)
2362	On the Angular Resolution of Multiple Targets	J. R. Sklar F. C. Schweppe	Accepted Proc. IEEE
2365	Baekscattering from an Undulating Surface with Applications to Radar Returns from the Moon	T. Hagfors	Accepted J. Geophys. Res.
2372 R	Lattice Energy Transfer and Stimulated Emission from CeF ₃ :Nd ⁺³	J. R. O'Connor W. A. Hargreaves	Appl. Phys. Letters <u>4</u> , 208 (1964)

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JA No.

78	The M.I.T. Magnetic-Core Memory	W. N. Papian	Proc. Eastern Joint Computer Conf., Washington, Dec. 1953
317	Theory of Ferrites in Rectangular Waveguides	K. J. Button B. Lax	Proc. Symp. on Electromagnetic Wave Theory, Ypsilanti, June 1955
434 R	Communication through Noisy, Random-Multipath Channels	G. L. Turin	IRE Natl. Conv., Record (1956)
475 R	Conference Keynote Speech	N. H. Taylor	Proc. Western Joint Computer Conf., San Francisco, Feb. 1956
542	Theory of Magneto-Band Effect and Cyclotron Resonance at Infrared Frequencies	B. Lax K. J. Button	Bull. Am. Phys. Soc. Ser. II, 1, 299 (1956)
543	A Pulsed Magnetic Field System for Cyclotron Resonance and Magneto-Band Effects at Infrared Frequencies	S. Foner H. H. Kolm	Bull. Am. Phys. Soc. Ser. II, 1, 298 (1956)
544	High-Speed, Sensitive Infrared Detector for Magneto-Band Effect and Cyclotron Resonance Measurements	R. J. Keyes S. Zwerdling	Bull. Am. Phys. Soc. Ser. II, 1, 299 (1956)
545	Experiments on Magneto-Band Effect and Cyclotron Resonance at Infrared Frequencies	S. Zwerdling R. J. Keyes S. Foner H. H. Kolm H. Lipson D. Warschauer B. Lax W. Paul	Bull. Am. Phys. Soc. Ser. II, 1, 299 (1956)
569	Long Time Work Function Changes Induced by Light and Electrostatic Fields	G. W. Pratt, Jr. H. H. Kolm	Proc. Conf. on Physics of Semiconductor Surfaces, Univ. of Pennsylvania, June 1956
570 R	1/f Noise and Germanium Surface Properties	A. L. McWhorter	Proc. Conf. on Physics of Semiconductor Surfaces, Univ. of Pennsylvania, June 1956
575	The Interaction of Oxygen with Clean Germanium Surfaces	P. H. Robinson M. Green J. A. Kafalas	Proc. Conf. on Physics of Semiconductor Surfaces, Univ. of Pennsylvania, June 1956

* Only Meeting Speeches published or accepted for publication are included.

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JA No.

602	Contributions to the Proceedings of the Conference on the Physics of Semiconductor Surfaces	R. H. Kingston W. H. Kleiner G. W. Pratt, Jr. H. H. Kolm S. H. Autler A. L. McWhorter	Proc. Conf. on Physics of Semiconductor Surfaces, Univ. of Pennsylvania, June 1956
611	The Production and Use of High Intensity Pulsed Magnetic Fields	S. Foner H. H. Kolm	Proc. Conf. on Magnetism and Magnetic Materials, Boston, Oct. 1956
636 R	Advances in Solid-State Electronics — Magnetics	P. E. Tannenwald	Proc. Natl. Electronics Conf., Chicago, Oct. 1956
659 R	TX-0, A Transistor Computer with a 256 by 256 Memory	J. L. Mitchell K. H. Olsen	Proc. Eastern Joint Computer Conf., New York, Dec. 1956
838 R	Magnetic Properties of Dilute Magnetic Alloys and of the Rare Earth Metals	G. W. Pratt, Jr.	J. Appl. Phys. <u>29</u> , 520 (1958)
850 R	Detection of Dislocation Tilts and Strains by X-Rays	L. Kaufman S. A. Kulin	Proc. AIME, Chicago, Nov. 1957
856 R	Constraint Principle in Ferromagnetic Domain Theory	L. Gold	J. Appl. Phys. <u>29</u> , 544 (1958)
857 R	Magnetization Processes in Heat-Treated Single Crystal Cobalt Ferrite	S. Foner J. O. Artman	J. Appl. Phys. <u>29</u> , 443 (1958)
860	Digital-Analog Function Generators	R. W. Hofheimer K. E. Perry	Proc. IRE Instrumentation Conf., Atlanta, Nov. 1957
861 R	Ferromagnetic Resonance in Ultra-Thin Films	M. H. Seavey, Jr. P. E. Tannenwald	J. Appl. Phys. <u>29</u> , 292 (1958)
863 R	Recent Advances in the Design of High Field DC Solenoid Magnets	H. H. Kolm	J. Appl. Phys. <u>29</u> , 489 (1958)
865 R	Steady-State and Pulse Measurement Techniques for Thin Magnetic Films in the VHF-UHF Range	D. O. Smith G. P. Weiss	J. Appl. Phys. <u>29</u> , 290 (1958)
866	Suggestion Concerning the Role of Wave-Function Symmetry in Transition Metals and Their Alloys	J. B. Goodenough	J. Appl. Phys. <u>29</u> , 513 (1958)
867	Some Ferrimagnetic Properties of the System $\text{Li}_x \text{Ni}_{1-x} \text{O}$	J. B. Goodenough D. G. Wickham W. J. Croft	J. Appl. Phys. <u>29</u> , 382 (1958)
868	Static and Dynamic Behavior of Thin Permalloy Films	D. O. Smith	J. Appl. Phys. <u>29</u> , 264 (1958)

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869	Some Magnetic and Crystallographic Properties of the System $\text{LaMn}_{1-x}\text{Ni}_x\text{O}_{3+\lambda}$	A. Wold R. J. Arnott J. B. Goodenough	J. Appl. Phys. <u>29</u> , 387 (1958)
870 R	Domain-Wall Structure in Permalloy Films	E. E. Huber, Jr. D. O. Smith J. B. Goodenough	J. Appl. Phys. <u>29</u> , 294 (1958)
871 R	Further Development of the Vibrating-Coil Magnetometer	K. Dwight N. Menyuk D. O. Smith	J. Appl. Phys. <u>29</u> , 491 (1958)
878	SAGE — A Data Processing System for Air Defense	R. R. Everett C. A. Zraket H. D. Benington §	Proc. Eastern Joint Computer Conf., Washington, Dec. 1957
879 R	Operation of the SAGE Duplex Computers	P. R. Vance L. G. Dooley § C. E. Diss §	Proc. Eastern Joint Computer Conf., Washington, Dec. 1957
910	A Band Separation Filter for the 225-400 Mcps Band	A. I. Grayzel	IRE Natl. Conv. Record (1958)
912	Signals with Uniform Ambiguity Functions	R. M. Lerner	IRE Natl. Conv. Record (1958)
913	The Measurement of Delay-Line Transducer Resistance	J. J. G. McCue J. A. Leavitt §	IRE Natl. Conv. Record (1958)
914 R	Analysis of the Spectral Shape of Modulation Splatter	R. Price	IRE Natl. Conv. Record (1958)
916	Algebraic Decoding for the Binary Erasure Channel	M. A. Epstein	IRE Natl. Conv. Record (1958)
933 R	Recent Developments on Solid State Masers	J. W. Meyer	Proc. Intl. Conf. on Solid State Physics in Electronics and Telecommunications, Brussels, June 1958
937	Tutorial Session on Detection Theory and Its Applications: Communications Applications	W. B. Davenport, Jr.	IRE Natl. Conv. Record (1958)
950 R	A Study of Sea Clutter Spectra	J. W. McGinn, Jr. E. W. Pike	Proc. Symp. on Statistical Methods in Radio Wave Propagation, Univ. of California, June 1958
958 R	Oscillatory Magneto-Absorption of Radiation in Semiconductors	S. Zwerdling	Proc. Am. Opticai Soc., Washington, Mar. 1958
994	Resonance and Magneto-Absorption in Solids at Millimeter and Infrared Frequencies	B. Lax	Proc. Intl. Conf. on Solid State Physics in Electronics and Telecommunications, Brussels, June 1958

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995	Low-Temperature Semiconducting Computing Elements	R. H. Rediker A. L. MeWhorter	Prof. Int'l. Conf. on Solid State Physics in Electronics and Telecommunications, Brussels, June 1958
1012A R	Magneto-Absorption Experiments in Semiconductors	S. Zwerdling	Proc. Int'l. Conf. on Solid State Physics in Electronics and Telecommunications, Brussels, June 1958
1015 R	Liquid Helium Cryostat with an Integral Supereconducting Resonator	E. Maxwell A. F. Schmidt §	Proc. Int'l. Inst. of Refrigeration, Delft, June 1958
1033 R	Cross Modulation of DC Resistance by Microwave Cyclotron Resonance	H. J. Zeiger C. J. Raueh M. E. Behrndt	J. Phys. Chem. Solids <u>8</u> , 496 (1958)
1034 R	Quantum Magneto-Absorption Phenomena in Semiconductors	B. Lax L. M. Roth S. Zwerdling	J. Phys. Chem. Solids <u>8</u> , 311 (1958)
1035 R	The Direct and Indirect Transition Excitons in Germanium	S. Zwerdling L. M. Roth B. Lax	J. Phys. Chem. Solids <u>8</u> , 397 (1958)
1036 R	A Many-Body Treatment of Dielectric Screening for Impurity States and Excitons in Semiconductors	L. M. Roth G. W. Pratt, Jr.	J. Phys. Chem. Solids <u>8</u> , 47 (1958)
1039 R	A Computer-Integrated Rapid-Access Magnetic-Tape System with Fixed Address	R. L. Best T. C. Stockebrand	Proc. Western Joint Computer Conf., Los Angeles, May 1958
1049	Optical Information Handling with Thin Magnetic Films	L. Kleinrock	Proc. Natl. Electronics Conf., Chicago, Oct. 1958
1091	Radar Observation of Birds	R. E. Richardson J. M. Stacey H. M. Kohler F. R. Naka	Proc. Seventh Weather Radar Conf., Miami Beach, Nov. 1958
1104	Angular Diversity Reception at 2290 Mcps Over a 188-Mile Path	J. H. Chisholm J. F. Roche L. P. Rainville H. G. Root	Rec. IRE Symp. on Extended Range and Space Communications, George Washington University, Oct. 1958
1111 R	Anisotropy in Permalloy Films	D. O. Smith	J. Appl. Phys. <u>30</u> , 264S (1959)
1112 R	Properties of Permalloy Films Having a Magnetoelastic Easy Axis Normal to the Film	E. E. Huber, Jr. D. O. Smith	J. Appl. Phys. <u>30</u> , 267S (1959)
1113 R	Magnetic Properties of Nickel-Iron Ferrite	N. Menyuk K. Dwight	J. Appl. Phys. <u>30</u> , 36S (1959)

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1115 R	Internal Structure of Cross-Tie Walls in Thin Permalloy Films Through High Resolution Bitter Techniques	R. M. Moon	J. Appl. Phys. <u>30</u> , 82S (1959)
1116 R	Test of Spin-Wave Theory with Precision Magnetization Measurements	S. Foner E. D. Thompson	J. Appl. Phys. <u>30</u> , 229S (1959)
1119 R	The Logical Design of CG 24	G. P. Dinneen I. L. Lebow I. S. Reed	Proc. Eastern Joint Computer Conf., Philadelphia, Dec. 1958
1128 R	Earth Satellite Observations Made with the Millstone Hill Radar	G. H. Pettengill L. G. Kraft, Jr.	Avionics Research, AGARD No. 40, 125 (1958)
1139 R	Automatic Design of Logical Networks	T. C. Bartee	Proc. Western Joint Computer Conf., San Francisco, Mar. 1958
1148	Wind Regimes for Radome Design	J. M. Austin § S. L. Hensel, Jr.	Proc. Lincoln Laboratory Rigid Radome Symp., MIT, Sept. 1958
1151	‡ Stress Distribution and Jump Phenomena in Spherical Frameworks under Pressure Loading	J. F. Besseling §	Proc. Lincoln Laboratory Rigid Radome Symp., MIT, Sept. 1958
1160 R	A Dynamic Programming Approach to Adaptive Control Processes	M. Freimer	IRE Natl. Conv. Record (1959)
1161 R	The Probability Density of the Output of a Filter When the Input is a Random Telegraphic Signal	J. A. McFadden	IRE Natl. Conv. Record (1959)
1163 R	Measuring the Characteristics of Present-Day Ultrasonic Delay Lines	J. J. G. McCue M. Axelbank	IRE Natl. Conv. Record (1959)
1164 R	Operating Characteristics of a Thin Film Memory	J. I. Raffel	J. Appl. Phys. <u>30</u> , 60S (1959)
1174	Impulse Switching of Ferrites	R. E. McMahon	Proc. Solid State Circuits Conf., Philadelphia, Feb. 1959; Proc. Eastern Joint Computer Conf., Philadelphia, Dec. 1958
1180 R	Optical Absorption of CoO and MnO Above and Below the Néel Temperature	G. W. Pratt, Jr. R. Coelho §	Proc. Am. Phys. Soc., New York, Jan. 1959
1219 R	Millimeter Instrumentation for Solid State Research	G. S. Heller	Proc. Symp. on Millimeter Waves, Polytechnic Institute of Brooklyn, Mar. 1959

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1301 R	Transistor Circuit Techniques for a Core Memory with 500 Millimicroseconds Cycle Time	V. J. Sferrino	Rec. IRE, WESCON Conv., San Francisco, Aug. 1959
1314	Self-Organizing Models for Learned Perception	B. G. Farley	Proc. Information Systems Branch Conf., Illinois Institute of Technology, May 1959
1317 R	An Error Correcting Encoder and Decoder for Phone Line Data	K. E. Perry	Rec. IRE, WESCON Conv., San Francisco, Aug. 1959
1324	A Communication System for a Small Interplanetary Vehicle	M. I. Skolnik L. Cartledge	Proc. IRE, PGSET Conv., San Francisco, Sept. 1959
1325 R	Properties of Thin Magnetic Films for Microwave Applications	P. E. Tannenwald	Rec. IRE, WESCON Conv., San Francisco, Aug. 1959
1326	Space-Charge Theory of Multicavity Klystrons	A. Bers § S. F. Catalano H. M. Jones	Rec. IRE-AIEE Conf. on Electron Tube Research, Univ. of Mexico, June 1959
1350	A Study of UHF Space Communications Through an Aurora Using the Moon as a Reflector	R. P. Ingalls J. C. James M. L. Stone	Ballistic Missiles and Space Technology <u>3</u> , 272 (1961)
1352A	Mechanical Design of 150-Foot Diameter Metal Space Frame Radome	L. P. Farnsworth T. F. King	Proc. ASME, Atlantic City, Nov. 1959
1375 R	Chemical Configuration of Germanium Surfaces in Aqueous Media	W. W. Harvey	J. Phys. Chem. Solids <u>14</u> , 82 (1960)
1380A R	Automatic Digital Data Error Recorder	E. J. Hofmann	Trans. IRE, PGI <u>I-10</u> , 27 (1961)
1384	Some Properties of Magnetic Films by Microwave Resonance	P. E. Tannenwald	Proc. Intl. Conf. on Structures and Properties of Thin Films, Lake George, Sept. 1959
1385	Etching and Inhibition of the {111} Surfaces of the III-V Intermetallic Compounds: InSb	H. C. Gatos M. C. Lavine	J. Phys. Chem. Solids <u>14</u> , 169 (1960)
1386	Some Structure-Sensitive Magnetic Properties of Permalloy Films	D. O. Smith	Proc. Intl. Conf. on Structures and Properties of Thin Films, Lake George, Sept. 1959
1391 R	The Oxidation of Intermetallic Compounds - III. The Room-Temperature Oxidation of A _{III} B _V Compounds	A. J. Rosenberg	J. Phys. Chem. Solids <u>14</u> , 175 (1960)

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1420A R	The Oxidation of Intermetallic Compounds: IV. The Sorption of Oxygen by InSb at 78°K	A. J. Rosenberg A. A. Menna	<u>Reactivity of Solids</u> , J. H. deBoer, et al., Eds. (Elsevier, Amsterdam, 1960)
1421A R	Pulsed Field Millimeter Wave Maser	S. Foner L. R. Momo A. Mayer R. A. Myers §	Proc. Quantum Electronics Conf., Bloomingburg, N.Y., Sept. 1959
1421 R	Initial Susceptibility Spectra of Permalloy Films	R. F. Soohoo	J. Appl. Phys. <u>31</u> , 218S (1960)
1422 R	Galvanomagnetic Effects in Ferromagnetic Resonance	M. H. Seavey, Jr.	J. Appl. Phys. <u>31</u> , 216S (1960)
1423A R	The Millstone Radar in Satellite and Missile Tracking	J. S. Arthur J. C. Henry G. H. Pettengill P. B. Sebring	Ballistic Missiles and Space Technology <u>3</u> , 84 (1961)
1424 R	Direct Cation-Cation Interactions in Primarily Ionic Solids	J. B. Goodenough	J. Appl. Phys. <u>31</u> , 359S (1960)
1425 R	Interpretation of the Magnetic and Crystallographic Properties of Several Iron, Nickel, and Iron-Nickel Nitrides	J. B. Goodenough A. Wold R. J. Arnott	J. Appl. Phys. <u>31</u> , 324S (1960)
1426 R	Classical Theory of Spin Configurations in the Cubic Spinel	T. A. Kaplan	J. Appl. Phys. <u>31</u> , 364S (1960)
1429 R	Magnetic Transitions in Ti_2O_3 and V_2O_3	P. H. Carr S. Foner	J. Appl. Phys. <u>31</u> , 344S (1960)
1430 R	Low-Temperature X-Ray Diffraction Studies on Vanadium Sesquioxide	E. P. Warekois	J. Appl. Phys. <u>31</u> , 346S (1960)
1433 R	Flux Reversal by Nonequilibrium Rotation in Magnetic Films	K. J. Harte	J. Appl. Phys. <u>31</u> , 283S (1960)
1451	Cyclotron Resonance and Impurity Levels in Semiconductors	B. Lax	Proc. Quantum Electronics Conf., Bloomingburg, N.Y., Sept. 1959
1472	The Spin Wave Spectrum in Magnetic Fields	R. F. Soohoo	Bull. Am. Phys. Soc. <u>4</u> , 453 (1959)
1478 R	Solid State Microwave Devices	R. H. Kingston	Naehrichtentechnische Fachberichte, Band 22 (1961)
1486 R	Anisotropy and Inversion in Permalloy Films	D. O. Smith E. E. Huber, Jr. M. S. Cohen G. P. Weiss	J. Appl. Phys. <u>31</u> , 295S (1960)

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JA No.

1487	Investigations into the Origin of Anisotropy in Oblique-Incidence Films	M. S. Cohen E. E. Huber, Jr. G. P. Weiss D. O. Smith	J. Appl. Phys. <u>31</u> , 291S (1960)
1496	Thermal Conduction in Rotating Liquid Helium II	C. E. Chase	Bull. Am. Phys. Soc. <u>5</u> , 13 (1960)
1507	Application of Boolean Matrices to the Analysis of Flow Diagrams	R. T. Prosser	Proc. Eastern Joint Computer Conf., Boston, Dec. 1959
1518A	Activity in Networks of Neuron-Like Elements	B. G. Farley W. A. Clark	Proc. Fourth Symp. on Information Theory, London, Aug. 1960
1518B	Activity in Networks of Neuron-Like Elements	B. G. Farley W. A. Clark	Proc. IRE Natl. Aeronautics Elec. Conf., Wright-Patterson AFB, Dayton, May 1960
1530	Communication in Digital Systems	I. L. Lebow	Information Theory (Butterworths, London, 1961)
1544	Recognition of Sloppy, Hand-Printed Characters	W. Doyle	Proc. Western Joint Computer Conf., San Francisco, May 1960
1552	Use of Pivotal Microbalance Design for the Determination of Mass Changes	J. M. Honig	Proc. Conf. on Microbalance Techniques, Ft. Monmouth, Jan. 1960
1564	Critical Heat Currents in Rotating Liquid Helium II	C. E. Chase	Bull. Am. Phys. Soc. <u>5</u> , 291 (1960)
1584	Precision Speed Control of a High-Speed Camera	D. A. Cahlander	Proc. Fifth Intl. Cong. on High-Speed Photography, Washington, Oct. 1960

Note: Since 1960, Meeting Speeches are designated MS rather than JA.

MS No.

10A	Some Characteristics of Ionospheric Backscatter Observed at 440 Mc/s	V. C. Pineo L. G. Kraft H. W. Briscoe	J. Geophys. Res. <u>65</u> , 2629 (1960)
14	Minimum Energy Spin Configurations in the Spinel Structure	T. A. Kaplan K. Dwight N. Menyuk	Bull. Am. Phys. Soc. <u>5</u> , 460 (1960)
22	Magneto-Spectroscopy in Semiconductors	B. Lax	Proc. Intl. Conf. on Semiconductor Physics, Prague, Aug. 1960
24	Damaged Layers in the {111} Surfaces of the III-V Semiconductor Compounds	H. C. Gatos M. C. Levine E. P. Warekois	Proc. Intl. Conf. on Semiconductor Physics, Prague, Aug. 1960

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MS No.

25	Moon Relay Communication	W. H. Radford	IRE Intl. Conv., Record (1960)
26	Impact Ionization of Impurities in Compensated Germanium	A. L. McWhorter R. H. Rediker	Proc. Intl. Conf. on Semiconductor Physics, Prague, Aug. 1960
28	On Geodesics That Are Also Orbits	R. Hermann	Bull. Am. Math. Soc. <u>66</u> , 91 (1960)
32 R	Pattern Recognition with an Adaptive Network	L. G. Roberts	IRE Intl. Conv., Record (1960)
40	General Spin-Wave Dispersion Relations	R. F. Soohoo	Bull. Am. Phys. Soc. <u>5</u> , 356 (1960)
42 R	Reproducibility of Electro-deposited Thin Film Memory Arrays	I. W. Wolf § T. S. Crowther	Proc. IRE Electronics Components Conf., Washington, May 1960
45 R	Magnetoplasma Effects in Solids	B. Lax	Trans. IRE, PGM TT MTT-9, 83 (1961)
49 R	Quantum Mechanical Three-Body Problem. II	L. J. Eges	Phys. Rev. <u>121</u> , 1744 (1961)
52	Proposed Symbology for Digital Systems	T. C. Bartee	Proc. AIEE Natl. Electronics Conf., Chicago, Oct. 1960
56 R	Some Results in the Measurement of Impulse Noise on Several Telephone Circuits	H. L. Yudkin	Proc. AIEE Natl. Electronics Conf., Chicago, Oct. 1960
58 R	Measured Error Distributions on the Bell A-1 Facility over Various Media	E. J. Hofmann	Proc. AIEE Natl. Electronics Conf., Chicago, Oct. 1960
59 R	The Testing of Digital Data Transmission Channels and Circuits	R. G. Enticknap	Proc. AIEE Natl. Electronics Conf., Chicago, Oct. 1960
60	The Design of Data Transmission Systems	R. G. Enticknap R. M. Lerner	Proc. AIEE Winter General Meeting, New York, 1961
61	Advanced Radar Information Evaluation System - ARIES	D. L. Lovenirth W. F. Holst	<u>Ballistic Missile and Space Technology</u> , Vol. III, D. P. Legally, Ed. (Academic Press, New York, 1960)
66 R	Errors in Data Transmission Systems	R. G. Enticknap	Trans. IRE, PGCS CS-9, 15 (1961)
67 R	Modulation and Signal Selection for Digital Data Systems	R. M. Lerner	Proc. AIEE Natl. Electronics Conf., Chicago, Oct. 1960
69 R	A Helium ³ Refrigerator	C. J. Rauch	Proc. Cryogenic Eng. Conf., Boulder, Aug. 1960

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78 R	The Effect of Channel Geometry and Rotation on the Critical Heat Current in Liquid Helium II	C. E. Chase	Proe. Seventh Intl. Conf. on Low Temperature Physics, Univ. of Toronto, Aug. 1960
82	Low-Temperature Devices	A. L. McWhorter	Trans. IRE, PGE <u>E-3</u> , 137 (1960)
84 R	Learning in Random Nets	M. Minsky O. G. Selfridge	Information Theory (Butterworths, London, 1961)
86 R	An Account of the Factors That Are Important in the Tracking of Space Vehicles by Means of Radar	W. W. Ward	Trans. IRE, PGSET Natl. Symp., Washington, Sept. 1960
86A R	Radar Tracking of Space Vehicles	W. W. Ward	NEREM Record, Boston (1960)
89 R	The Computer as a Pattern Generator for Perceptual Research	B. W. White	Behavioral Sci. <u>6</u> , 252 (1961)
91 R	Distances and Ratios in Psychophysical Scaling	W. S. Torgerson	Acta Psychol. <u>19</u> , 201 (1961)
94 R	Spin-Lattice Interaction for Electrons in Semiconductors	L. M. Roth	Proc. Intl. Conf. on Semiconduc- tor Physics, Prague, Aug. 1960
106 R	Anisotropy in Permalloy Films Evaporated at Grazing Incidence	M. S. Cohen	J. Appl. Phys. Suppl. <u>32</u> , 87S (1961)
112 R	Superconducting Resonant Cavities	E. Maxwell	Proe. Cryogenie Eng. Conf., Boulder, Aug. 1960
121 R	Excitation and Boundary Effects in Spin-Wave Resonance	R. F. Soohoo	J. Appl. Phys. Suppl. <u>32</u> , 148S (1961)
124 R	Impulse Selection for Core Logic	R. H. Tancrell	J. Appl. Phys. Suppl. <u>32</u> , 40S (1961)
126 R	Antiferromagnetic Resonance in $(\text{Cr}_2\text{O}_3)_{1-x} \cdot (\text{Al}_2\text{O}_3)$ Single Crystals	S. Foner	J. Appl. Phys. Suppl. <u>32</u> , 63S (1961)
127 R	Annealing of Oblique-Incidence Permalloy Films	G. P. Weiss D. O. Smith	J. Appl. Phys. Suppl. <u>32</u> , 85S (1961)
132 R	Anisotropy in Nickel-Iron Films	D. O. Smith	J. Appl. Phys. Suppl. <u>32</u> , 705S (1961)
133 R	Classical Theory of the Ground Spin State in Spinel	T. A. Kaplan K. Dwight D. H. Lyons N. Menyuk	J. Appl. Phys. Suppl. <u>32</u> , 135S (1961)
135 R	Areas for Research and Development in the Millimeter Wavelength Region	J. W. Meyer G. S. Heller	NEREM Record (1960)

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141 R	Antiferromagnetic Materials for Millimeter and Sub-millimeter Devices	G. S. Heller J. J. Stickler J. B. Thaxter	J. Appl. Phys. Suppl. <u>32</u> , 307S (1961)
143 R	A Random Access Cryosar Memory	R. C. Johnston	NEREM Record (1960)
144A R	CW Millimeter Wavelength Maser	S. Foner L. R. Momo J. B. Thaxter G. S. Heller R. M. White	<u>Advances in Quantum Electronics</u> , J. R. Singer, Ed. (Columbia Univ. Press, New York, 1961)
159 R	A Sequential Detection System for the Processing of Radar Returns	A. A. Galvin	Proc. IRE <u>49</u> , 1417 (1961)
160 R	Radar System Performance in a Dense-Target Environment	E. N. Fowle E. J. Kelly, Jr. J. A. Sheehan	IRE Intl. Conv. Record (1961)
161 R	A Method of Designing Signals of Large Time-Bandwidth Product	E. L. Key E. N. Fowle \$ R. D. Haggarty	IRE Intl. Conv. Record (1961)
162 R	Ultrasonic Instrumentation for Research on Bats	J. J. G. McCue	IRE Intl. Conv. Record (1961)
163 R	The Measurement of the Phenomena Associated with the Hypervelocity Re-entries Into the Atmosphere	G. F. Pippert	NEREM Record (1960)
170A	Stochastic Approximation and Its Application to Problems of Prediction and Control Synthesis	L. A. Gardner, Jr.	<u>International Symposium on Nonlinear Differential Equations and Nonlinear Mechanics</u> (Academic Press, New York, 1963)
172 R	Radar Measurements of the Lunar Surface	G. H. Pettengill J. C. Henry	Proc. Lunar Symp. of Intl. Astronomical Union, Leningrad, Dec. 1960; <u>Advances in the Astronautical Sciences</u> , Vol. 8 (Plenum Press, New York, 1963)
173	The Design of an "Error-Free" Data Transmission System for Telephone Circuits	B. Reiffen W. G. Schmidt H. L. Yudkin	Proc. AIEE Winter General Meeting, New York (1961)
178	An Operational UHF Reactance Amplifier	A. Parsons E. McCurley C. Blake	Proc. Symp. on Low Noise Receivers, Lincoln Laboratory MIT, Oct. 1960
179	Recent Experiences with an X-Band Maser Receiver and an S-Band Parametric Amplifier Radar Receiver	F. J. Dominick	Proc. Symp. on Low Noise Receivers, Lincoln Laboratory, MIT, Oct. 1960

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180 R	Perturbation Theory of the Reciprocal Ferrite Phase Shifter	K. J. Button B. Lax	Proc. IEE <u>109B</u> , Suppl. 21, 56 (1962)
181 R	Stoichiometry of Copper Bonding Using Copper Oxide	E. B. Murphy T. P. Turnbull	Proc. Am. Electroplaters' Soc., Newark (1961)
199	Nonquadratic Conduction Band in HgSe	G. B. Wright A. J. Strauss T. C. Harman	Bull. Am. Phys. Soc. <u>6</u> , 155 (1961)
200	Electrical Properties of HgSe and HgSe-HgTe Alloys	A. J. Strauss T. C. Harman	Bull. Am. Phys. Soc. <u>6</u> , 156 (1961)
201	Overlapping Bands in HgSe and HgSe-HgTe Alloys	T. C. Harman A. J. Strauss	Bull. Am. Phys. Soc. <u>6</u> , 156 (1961)
202	Ferro- and Antiferromagnetism for Spin I	G. F. Dresselhaus	Bull. Am. Phys. Soc. <u>6</u> , 124 (1961)
203	Observation of Quantum Effects in Germanium and Silieon at Millimeter Wavelengths	J. J. Stickler C. J. Rauch H. J. Zeiger G. S. Heller	Bull. Am. Phys. Soc. <u>6</u> , 115 (1961)
204	Interband Transitions in Metals	M. S. Dresselhaus G. F. Dresselhaus	Bull. Am. Phys. Soc. <u>6</u> , 146 (1961)
205	Simple Theory of Tunneling and Its Dependence on a Magnetic Field	P. N. Argyres B. Lax	Bull. Am. Phys. Soc. <u>6</u> , 105 (1961)
208	One-Electron Energy Band Method	L. J. Eges	Bull. Am. Phys. Soc. <u>6</u> , 108 (1961)
209	High-Resolution Oscillatory Magneto-Absorption Measurements of InSb at Liquid-Helium Temperature	S. Zwerdling J. P. Theriault	Bull. Am. Phys. Soc. <u>6</u> , 147 (1961)
210	Perturbation Theory of Cavities	R. F. Soohoo	Bull. Am. Phys. Soc. <u>6</u> , 125 (1961)
211	Antiferromagnetic Ground Site	L. M. Roth	Bull. Am. Phys. Soc. <u>6</u> , 124 (1961)
217 R	Cyclotron Resonance Maser	B. Lax	Advances in Quantum Electronics, J. R. Singer, Ed. (Columbia Univ. Press, New York, 1961)
227 R	Spin-Orbit vs Jahn Teller Deformation in Chromium Spinels	J. B. Goodenough	J. Phys. Soc. Japan <u>17</u> , Suppl. B-1, 185 (1962)
229	Design of a Twelve Horn Monopulse Feed	L. J. Ricardi L. Niro	Rec. Seventh Annual Radar Symp., Univ. of Michigan, May 1961
237 R	Spin Wave Resonance in Magnetic Films	P. E. Tannenwald	J. Phys. Soc. Japan <u>17</u> , Suppl. B-1, 592 (1962)

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238 R	Positive and Negative Anisotropy in Nickel-Iron Films	D. O. Smith	J. Phys. Soc. Japan <u>17</u> , Suppl. B-1, 550 (1962)
240	Deep Space Probes at Millimeter Wavelengths	J. W. Meyer V. L. Lynn C. M. Steinmetz E. A. Crocker	Rec. Seventh Annual Radar Symp., Univ. of Michigan, May 1961 H-417, M \$1.50, P \$6.15
241 R	Mass Spectrographic Evidence for Deviations from Stoichiometry in GaSb	E. B. Owens A. J. Strauss	Proc. Conf. on Ultrapurification of Semiconductor Materials, Boston, Apr. 1961
242 R	Technical Information Flow Patterns	M. M. Kessler	Proc. Western Joint Computer Conf., Los Angles, May 1961
249	Baseball: An Automatic Question-Answerer	B. F. Green, Jr. A. K. Wolf C. Chomsky K. Laughery	Proc. Western Joint Computer Conf., Los Angeles, May 1961
253A R	Experimental Studies of the F Region Using the Incoherent Backscatter Technique at Frequencies Around 400 Me/s	V. C. Pineo L. G. Kraft H. W. Briseoc D. P. Hynek	Electron Density Profiles (Pergamon Press, New York, 1962)
257 R	High Field Magnetic Resonance Experiments	S. Foner	J. Phys. Soc. Japan <u>17</u> , Suppl. B-1, 424 (1962)
267 R	Solar Radiation Pressure Effects, Gas Leakage Rates, and Air Densities Inferred from the Orbit of Echo I	H. M. Jones I. I. Shapiro P. E. Zadunaisky §	Space Research II (Proc. Second Intl. Space Science Symp.), H. C. Van de Hulst, <u>et al.</u> , Eds. (North-Holland, Amsterdam, 1961)
268 R	Band Structure of HgSe and HgSe-HgTe Alloys	T. C. Harman A. J. Strauss	J. Appl. Phys. <u>32S</u> , 2265 (1961)
269 R	Magnetoreflection Experiments in Intermetallics	G. B. Wright B. Lax	J. Appl. Phys. <u>32S</u> , 2113 (1961)
270 R	Interband Faraday Rotation in III-V Compounds	B. Lax Y. Nishina §	J. Appl. Phys. <u>32S</u> , 2128 (1961)
272 R	Infrared and Dielectric Analysis of Structural Polyurethane Foams	E. B. Murphy W. A. O'Neil	SPE J. <u>18</u> , 47 (1962)
285 R	Report from a Symposium on the Application of Low Noise Receivers to Radar and Allied Equipment	J. W. Meyer	Low Noise Electronics (Proc. Fifth AGARD Avionics Panel Conf.) (Pergamon Press, London, 1962)
292 R	Some Results of Computer Simulation of Neuron-Like Nets	B. G. Farley	Proc. Fed. of Amer. Soes. for Exptl. Biology, Apr. 1961
301 R	Magnetic Field Dependence of the Superconducting Energy Gap in Ginzburg-Landau Theory with Application to Al	D. H. Douglass, Jr.	IBM J. Research Develop. <u>6</u> , 44 (1962)

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307 R	Texture and Orientation of Evaporated Bismuth Films	T. P. Turnbull E. P. Warekois	<u>Metallurgy of Semieonduetor Materials</u> (Interseience Publishers, New York, 1962)
328	The Design of Radar Astronomy Instrumentation	H. G. Weiss	NEREM Record (1961)
343	The $(1 - \cos \varphi)$ Radiometer	J. W. McGinn	NEREM Record (1961)
344	Radiometric Instrumentation at Eight Millimeters	J. W. Meyer J. J. Kirwan D. M. Towle	NEREM Record (1961)
347 R	Statistical Mechanics of Dilute Solid Solutions	R. F. Brebriek	J. Appl. Phys. <u>33S</u> , 422 (1962)
350 R	Cobalt Ferrite Crystal Growth from the Ternary Flux System $\text{Na}_2\text{O}-\text{CoO}-\text{Fe}_2\text{O}_3$	W. Kunmann A. Wold E. Banks	J. Appl. Phys. <u>33S</u> , 1364 (1962)
351 R	Vanadium Iron Oxides	A. Wold D. Rogers R. J. Arnott N. Menyuk	J. Appl. Phys. <u>33S</u> , 1208 (1962)
353 R	Antiferromagnetic Resonance in MnTiO_3	J. J. Stiekler G. S. Heller	J. Appl. Phys. <u>33S</u> , 1302 (1962)
356 R	Isotropic Stress Measurements in Permalloy Films	G. P. Weiss D. O. Smith	J. Appl. Phys. <u>33S</u> , 1166 (1962)
361 R	Magnetic Properties of Cr_5S_6 in Chromium Sulfides	K. Dwight R. W. Germann N. Menyuk A. Wold	J. Appl. Phys. <u>33S</u> , 1341 (1962)
362 R	Magnetic Transitions in Cubic Spinels	N. Menyuk A. Wold D. B. Rogers K. Dwight	J. Appl. Phys. <u>33S</u> , 1144 (1962)
363 R	Cation-Cation Three-Membered Ring Formation	J. B. Goodenough	J. Appl. Phys. <u>33S</u> , 1197 (1962)
369A R	Time-Varying Channels with Delay Spread	P. E. Green, Jr.	Proc. Conf. on Microwave Communication, Budapest, 12-15 June 1962
381	An Electronic Decoder for Bose-Chaudhuri-Hocquenghem Error-Correcting Codes	T. C. Bartee D. I. Schneider	Trans. IRE, PGIT <u>IT-8</u> , S-17 (1962)
382 R	Demonstration of Magnetic Domain-Wall Storage and Logic	J. M. Ballantyne	J. Appl. Phys. <u>33S</u> , 1067 (1962)
391 R	Digital Techniques in Neuro-electric Data Processing	W. A. Clark	<u>Computer Techniques in EEG Analysis</u> (Elsevier, Amsterdam, 1961)

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394 R	Superconducting Magnets	S. H. Autler	NEREM Record (1961)
396 R	A Simple Iterative Procedure for the Identification of the Unknown Parameters of a Linear Time Varying Discrete System	H. Kushner	J. Basic Eng. <u>85</u> , 227 (1963)
423	Scattering from Plasma Cylinders with Radial Variations in Electron Density	C. M. deRidder S. Edelberg	Proc. Conf. on the Plasma Sheath, Boston, Apr. 1962
424 R	Conductance of Germanium in Contact with Aqueous Electrolytes	W. W. Harvey	Ann. N. Y. Acad. Sci. <u>101</u> , 904 (1963)
433 R	A VHF Solar Radar System	W. G. Abel J. H. Chisholm P. L. Fleck J. C. James	IRE Intl. Conv. Record, Pt. 5, (1962)
436 R	Crystallographic Orientation Effects on Some High Temperature Reactions of Germanium	H. C. Gatos M. C. Lavine	Ann. N. Y. Acad. Sci. <u>101</u> , 983 (1963)
437 R	Near-Field Characteristics of a Linear Array	L. J. Ricardi	Proc. Symp. on Electromagnetic Theory and Antennas, Copenhagen, June 1962
441 R	High Magnetic Field Research	B. Lax	J. Appl. Phys. <u>33S</u> , 1025 (1962)
444 R	Error Probabilities for Adaptive Multichannel Reception of Binary Signals	R. Price	Trans. IRE, PGIT <u>IT-8</u> , 305 (1962)
447A	Comparative Analyses of Thin Paraboloidal Shells	J. W. Mar § F. Y. M. Wan	Proc. World Conf. on Shell Structures, San Francisco, Oct. 1962
448 R	SECO: A Self-Regulating Error Correcting Coder-Decoder	K. E. Perry J. M. Wozencraft §	Trans. IRE, PGIT <u>IT-8</u> , 128 (1962)
449 R	Statistical Mechanical Theory of Resonance	P. N. Argyres	Proc. Int'l. Conf. on Magnetic and Electric Resonance and Relaxation, Eindhoven, July 1962
451 R	Transport Theory of Electrons in Electric, Magnetic and Phonon Fields	N. J. Horing P. N. Argyres	Proc. Int'l. Conf. on Physics of Semiconductors, Exeter, July 1962
453 R	Optical and Electrical Properties of $\text{Cd}_x\text{Hg}_{1-x}\text{Te}$ Alloys	A. J. Strauss T. C. Harman J. G. Mavroides D. H. Dickey M. S. Dresselhaus	Proc. Int'l. Conf. on Physics of Semiconductors, Exeter, July 1962

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454 R	Millimeter Cyclotron Resonance in Diamond	C. J. Rauch	Proc. Intl. Conf. on Physics of Semiconductors, Exeter July 1962
455 R	Magneto-Absorption in InSb: Valence Band Anisotropy. Measurements Far Above Absorption Edge	S. Zwerdling W. H. Kleiner J. P. Theriault	Proc. Intl. Conf. on Physics of Semiconductors, Exeter, July 1962
456 R	Effective Mass Measurements in Semiconductors	B. Lax	Proc. Intl. Conf. on Physics of Semiconductors, Exeter, July 1962
457 R	Dispersion Theory, Interband and Plasma Effects	B. Lax J. G. Mavroides J. Kolodieczak §	Proc. Intl. Conf. on Physics of Semiconductors, Exeter, July 1962
461A R	Ferromagnetism and Antiferromagnetism in a Simple Cubic Lattice	G. F. Dresselhaus	Proc. Intl. Conf. on Low Temperature Physics, London, Sept. 1962
470 R	Keynote: Some Notes on the Technology of Recognition	O. G. Selfridge	Proc. Symp. on Optical Character Recognition, Washington, Jan. 1962
475A R	Foamed Materials in the Design of Precision Radar Reflectors	C. A. Pappas E. B. Murphy	Proc. Regional Tech. Conf. of Soc. Plastics Engineers, Boston, June 1962
479 R	Quantum Effects in Germanium and Silicon	G. S. Heller J. J. Stickler H. J. Zeiger	Proc. Intl. Conf. on Magnetic and Electric Resonance and Relaxation, Eindhoven, July 1962
480	Antiferromagnetic Resonance in Powders	G. S. Heller J. J. Stickler A. Wold	Proc. Intl. Conf. on Magnetic and Electric Resonance and Relaxation, Eindhoven, July 1962
482A R	Some Similarities Between the Behavior of a Neural Network Model and Electrophysiological Experiments	B. G. Farley	Proc. Conf. on Self-Organizing Systems, Chicago, May 1962
487	Radar Measurements of Venus	G. H. Pettengill	Proc. Third Intl. Space Science Symp., Washington, May 1962
504	Theory of Indirect Exchange in Rare Earth Metals	D. H. Lyons T. A. Kaplan	Bull. Am. Phys. Soc. <u>7</u> , 313 (1962)
508 R	A Computer Program for Recognizing the English Fricative Consonants f and θ	J. W. Forgie C. D. Forgie	Proc. Fourth Intl. Cong. on Acoustics, Copenhagen, Aug. 1962
509 R	Problems in the Study of the Nervous System	B. G. Farley	Proc. Western Joint Computer Conf., San Francisco, May 1962
510 R	Circuits for the FX-1 Computer	K. H. Konkle	Proc. Western Joint Computer Conf., San Francisco, May 1962

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512 R	The Niobium-Tin System: Stability Ranges and Superconducting Properties of Nb_2Sn_3 and Nb_3Sn_2	T. B. Reed H. C. Gatos W. J. LaFleur J. T. Roddy	<u>Superconductors</u> (Interscience Publishers, New York, 1962)
513 R	Description of a Computer Program for Pitch Detection	B. Gold	Proc. Fourth Intl. Cong. on Acoustics, Copenhagen, Aug. 1962
519 R	The Chemical Approach to Semiconductors	H. C. Gatos A. J. Rosenberg	Proc. Symp. on Physics and Chemistry of Ceramics, Pennsylvania State Univ., May 1962
521 R	Radar Reflections from the Sun at VHF	W. G. Abel J. H. Chisholm J. C. James	<u>Space Research III</u> (Proc. Third Intl. Space Science Symp.) (North-Holland, Amsterdam, 1963)
524	C-Band Radar - Beacon Tracking for Project Mercury	B. H. Labitt	Trans. IEEE, Commun. Electron., No. 69, 647 (1963)
525	Tracking Performance of the Mercury Quad-Helix Acquisition Aid	J. G. Barry G. F. Dalrymple	Trans. IEEE, Commun. Electron., No. 69, 657 (1963)
527	Performance Evaluation Techniques for a Large Aperture Millimeter System	V. L. Lynn E. A. Croeker J. W. Meyer	Proc. Electromagnetic Window Symp., Columbus, June 1962
531 R	The Organization of Organization	O. G. Selfridge	Proc. Conf. on Self-Organizing Systems, Chicago, May 1962
543 R	Critical Heat Currents in Liquid Helium II	C. E. Chase	Proc. Intl. Conf. on Low Temperature Physics, London, Sept. 1962
544	Energy of a Vortex Ring in a Tube and Critical Velocities in Liquid He II	J. C. Fineman C. E. Chase	Proc. Intl. Conf. on Low Temperature Physics, London, Sept. 1962
548B	A Pulse Compression System Employing a Linear FM Gaussian Signal	E. N. Fowle § D. R. Carey R. E. VanderSchuur R. C. Yost	Proc. RADC Symp., Griffiss AFB, New York, Oct. 1962
549 R	Hill Climbing Methods for the Optimization of Multi-parameter Noise Disturbed Systems	H. J. Kushner	J. Basic Eng. <u>85</u> , 157 (1963)
551 R	Measurements of the Superconducting Energy Gap in Lead and Aluminum Films	D. H. Douglass, Jr. R. H. Meservey	Proc. Intl. Conf. on Low Temperature Physics, London, Sept. 1962
556 R	New Method for Measuring Changes in Surface Impedance: Application to Superconducting Tin at X-Band	M. S. Dresselhaus D. H. Douglass, Jr. R. H. Kyhl §	Proc. Intl. Conf. on Low Temperature Physics, London, Sept. 1962

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560 R	Real-Channel Aspects of an Error-Free Data Transmission System for Toll-Grade Telephone Circuits	W. G. Schmidt	Proc. WESCON, Los Angeles, Aug. 1962
567 R	Thunderstorm Excitation of the Earth-Ionosphere Cavity	M. Balscr C. A. Wagner	Proc. AGARD Conf., Munich, Sept. 1962
581	Mobility Without Vision by Living Creatures Other Than Man (With Special Reference to Insectivorous Bats)	F. A. Webster §	Proc. Mobility Research Conf., M.I.T., Oct. 1961
583 R	An Evaluation of Recent Developments in the Field of Learning Machines	O. G. Selfridge	IRE Intl. Conv. Record (1962)
588 R	Vapor Growth and Doping of Silicon Crystals Using Tellurium as Carrier	S. Fischler	<u>Metallurgy of Advanced Electronic Materials</u> , Vol. 19 (Interscience Publishers, New York, 1963)
589 R	Superconducting Behavior of Some β -Tungsten Structure Niobium Compounds and Their Alloys	T. B. Reed H. C. Gatos W. J. LaFleur J. T. Roddy	<u>Metallurgy of Advanced Electronic Materials</u> , Vol. 19, (Interscience Publishers, New York, 1963)
590 R	Analysis of Large Pin-Connected Three-Dimensional Frameworks	K. S. Parikh § E. C. Rossow § J. M. Biggs §	Proc. Symp. on Use of Computers in Civil Engineering, Lisbon, Oct. 1962
591 R	Current Status of High-Field Superconductivity	S. H. Autler	<u>Metallurgy of Advanced Electronic Materials</u> , Vol. 19 (Interscience Publishers, New York, 1963)
594 R	The Reaction of Stannane with Niobium Wires, and Their Resulting Superconducting Behavior	M. D. Banus H. C. Gatos M. C. Lavine T. B. Reed	<u>Metallurgy of Advanced Electronic Materials</u> , Vol. 19 (Interscience Publishers, New York, 1963)
595	Radar Studies of the Lunar Surface	J. V. Evans	NEREM Record (1962)
599	Growth and Nucleation Sites on Iron Whiskers, as Revealed by an Oxide Replica Technique	T. P. Turnbull M. J. Button	Proc. Intl. Cong. For Electron Microscopy, Philadelphia, Aug. 1962
601	A Lorentz Attachment for the RCA EMU-3 Microscope	M. S. Cohen	Proc. Intl. Cong. for Electron Microscopy, Philadelphia, Aug. 1962
615 R	Minimum Fuel Feedback Control Systems: Second Order Cascade	M. Athans	Trans. IEEE, and Appl. Indust. <u>81</u> , 321 (1963)
621	Experimental Evaluation of a 1000-Wavelength Antenna	V. L. Lynn K. J. Keeping W. D. Fitzgerald	NEREM Record (1962)

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626 R	Visual Pattern Recognition: The Problems and Promise	O. G. Selfridge	Proc. Intl. Cong. on Technology and Blindness, New York, June 1962
627 R	The Biased-Gap Klystron	I. Hefni	Proc. High-Power Microwave Tube Symp., Fort Monmouth, Sept. 1962
628 R	Antiferromagnetic Materials and Their Application at Millimeter and Submillimeter Wavelengths	G. S. Heller	NEREM Record (1962)
630	Magnetostatic Modes in Thin Films	K. J. Harte	Bull. Am. Phys. Soc. <u>7</u> , 448 (1962)
632 R	Cascading Low-Gain Parametric Amplifier Stages	C. Blake	Proc. Natl. Electronics Conf., Chicago, Oct. 1962
640 R	Spiral and Concentric-Circle Walls Observed by Lorentz Microscopy	M. S. Cohen	J. Appl. Phys. <u>34</u> , 1221 (1963)
641	The Self-Shielded Microwave Discharge	C. E. Muehe	NEREM Record (1962)
644 R	Measurement of the Surface Temperature of a Solid Under Electron Bombardment	E. Silverman	Proc. High-Power Microwave Tube Symp., Fort Monmouth, Sept. 1962
645	Radio Echo Studies of the Moon	J. V. Evans	Proc. Conf. on Lunar Exploration, Virginia Polytechnic Institute, Aug. 1962
654	Stimulated Infrared Emission from Small Glass Fibers	H. A. Bostick	Proc. Boston Laser Conf., Northeastern Univ., Aug. 1962
660 R	Rotatable Anisotropy in Negative Magnetostriction Ni-Fe Films	S. S. Lehrer	J. Appl. Phys. <u>34</u> , 1207 (1963)
662 R	Crystallographic Transitions in Several Chromium Spinel Systems	A. Wold R. J. Arnott E. Whipple J. B. Goodenough	J. Appl. Phys. <u>34</u> , 1085 (1963)
665 R	Thermodynamic Self-Consistent Theory of Indirect Exchange in Metals	T. A. Kaplan	J. Appl. Phys. <u>34</u> , 1339 (1963)
666 R	Magnetic Properties of a Single Crystal of Manganese Phosphide	E. E. Huber, Jr. D. H. Ridgley	J. Appl. Phys. <u>34</u> , 1099 (1963)
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